issue No.4 2018 **TEXDATA INTERNATIONAL**

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THE TEXDATA INTERNATIONAL MAGAZINE

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DIGITAL TWIN "QUALITY FIRST" EXPECTED AT THE ITMA ASIA + CITME 2018

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MANY THANKS!







WE CARE ABOUT YOUR FUTURE

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From 6 to 8 November, at COMPOSITES EUROPE in Stuttgart (Germany) trade fair visitors will meet more than 350 exhibitors from 30 countries





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FROM THE EDITOR

DEAR READER,



as you will quickly realise, we have updated our appearance to make it easier and more convenient for you to read our material. Even more important are the changes we have made to our editing process, which we will underline in our upcoming issues. This specifically relates to concentrating on the most important themes for the future within the textile chain. For us, these themes are Industry 4.0 or digitalisation, sustainability, recycling (closing the loop), new materials and of course innovation with regard to the textile machines that correspond to the changes.

From 2019, we want to report in detail about each of these themes in every issue. We will retain our mix of themes, consisting of yarns, textiles, nonwovens and composites, and will focus even more sharply on the future. As usual, the issues will contain further topical focusses. This concerns textile processes such as CAD/Design, digital printing and coating and likewise special textiles such as denim and smart textiles.

Alongside this, we have also given the TexData magazine its own name. In our view, the new name, textile.4U, indicates very nicely what is most important to us. We hope actively to support you, our valued readers, during the textile industry's journey into the future and provide you with information that is of value to you. Information that provides direction, that brings something to your attention, that offers suggestions and sources and that can make some of your tasks a little easier.

Please do let us know what you think of our changes and ideas. We are as always looking forward to your comments and suggestions to redaktion@texdata.com.

Olives Ehring

BEST REGARDS OLIVER SCHMIDT #Editor-in-chief

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DIGITAL TWIN

n 2017, the Gartner Group declared the digital twin to be one of the 10 most important strategic technology trends. Shortly thereafter, at the Hanover Messe, it was even proclaimed as the major project for 2018. This decision was justified by the fact that, based on a further Gartner survey, almost half of the companies that use IoT technology want to make use of digital twins in the coming year, or at least plan to do so in the future. We want to take a look at what lies behind this keyword and which approaches are being used in the industry as a whole and in the textile industry in particular.

The Gabler Wirtschaftslexikon (dictionary of economics), or more specifically Professor Stefan Grösser, gives the following definition: 'A digital twin is a virtual model of, for example, a process, product or service which combines the real world with the virtual world.

Digital twins use real-world data from installed sensors that represent, for example, the operating conditions or position of machines. This linking of the real and virtual worlds allows data to be analysed and systems to be monitored in order to, for example, understand and resolve problems before they even develop, avoid downtimes, develop new opportunities and plan for the future with the help of computer simulations.' The idea of a digital twin was first introduced back in 2002 by Dr Michael Grieves (University of Michigan) in a lecture during a training course at a PLM centre. With the emergence of Industry 4.0, the Internet of Things and the subsequent developments in technology, the concept has since steadily gained in importance. INDUSTRY 4.0 & DIGITIZATION

The definition provided already hints at why so many companies are currently focussing on the idea of a digital twin. It boasts a wide range of potential applications and it is perceived to have superb utility. It allows users to target increases in efficiency of 30 per cent and more. Let's take a closer look at these benefits.

THE BENEFITS OF DIGITAL TWINS

The two-sided synchronisation of the real product and the digital reflection offers great potential for optimisation in production, as configurations of the real product that emerge from the simulation can be implemented directly and the real-world data in the twin's system can show at any given time whether the system is running as desired. The two-way data transfer takes place almost in real time so that the entire optimisation cycle can be automated and accelerated. This includes the simulation and the feedback of the results.

Gartner itself defines the benefits for companies at a higher level and points out how, through the use of new technologies, decision-making processes in companies can be significantly improved. Dr Thomas Kuhn, Senior Head of Department of Embedded Systems at Fraunhofer IESE, focusses on particular applications and indicates that a major benefit of digital twins is the ability to reduce downtimes enormously through virtual testing, thereby making the system productive considerably more quickly. Retrofits in production processes are therefore much more flexible. He goes into detail about the performance of what-if analyses and their virtual integration or implementation being further important benefits.

A well-known example of a substantial benefit is predictive maintenance. Sensors in machinery continuously record data while in operation (known as control values) and send this data to the intended cloud. As a result, the manufacturer can calculate the wear values, in particular the stress and consumption cycles, and ultimately commission maintenance of those machines before it becomes necessary, thereby avoiding expensive repairs. But what role do digital twins play in the context of predictive maintenance? They bring the process to a new level, in which the virtual copies of the machines allow the gathered data to be understood in detail and enable more precise predictions to be made. Digital twins can therefore be said to help with analysing and interpreting the data. Gabler differentiates the benefits according to the phases of the life cycle of an object, from the design through the production and use right up to its recycling, and sees benefits for companies in every phase. The digital twin can help, for example, to explore the impacts of various design alternatives during the

design phase, and to carry out simulations and tests in order to ensure that the product designs fulfil the requirements.

In its description of the development and benefits of a digital twin, Siemens went one step further and presented a holistic approach at the Hanover Messe 2018 - the concept of three digital twins. The idea behind this approach is that the company is able to produce a digital twin not just of the product and the production process, but also of the performance of the real product in the physical world. According to Siemens, 'the digital twin will serve to create a self-contained connection between the virtual world of product development and planning on the one hand and the physical world of the production system and product performance on the other. This connection makes it possible to utilise findings gained in the physical wor-Id as a tool for making well-informed decisions throughout the entire life cycle of the product and production processes.' Siemens also points to the what-if scenarios and predictions of future performance as enormous benefits provided by digital twins.

If all this is too abstract, perhaps an example from the analogue world might make the concept easier to understand, given that twins themselves are a proven system when used as a backup. Probably the bestknown example of this benefit comes from NASA's space travel endeavours.

INDUSTRY 4.0 & DIGITIZATION

Apollo 13 became famous for 'Houston, we have a problem', and in the end the successful solution was developed primarily thanks to the mirrored system back on earth. The digital twin in this case functions no differently in theory, even if at this level one must first learn how to use it.

MORE AND MORE APPLICATIONS

According to the Gartner analysis, it will be another five years before the technology achieves its full potential. Indeed, there are already a number of products for both automation technology and software systems that can be used to realise digital twins, but as in many other sectors the solutions are incomplete, and in some instances proprietary or at the very least not integrated. The challenges that must be solved in the future are standardising and harmonising digital twins across various platforms. The systems must ultimately be sufficiently open and harmonised to mean that the real components of entire digital production facilities can be created based on their digital twins.

One of the first practical demonstrations of digital twins was carried out by the Fraunhofer Insititute for Production Systems and Design Technology IPK at the Hanover Messe 2017. The presentation comprised a system designed to produce fully customisable drinks coasters.

Professor Rainer Stark, Project Leader at Fraunhofer IPK, spoke of the motivation behind creating such a system in his presentation. 'Our aim is not just to describe the vital technologies, processes and methods of Industry 4.0, but to make them really tangible.' In order to realise this ambitious concept, the experts at Fraunhofer had to overcome a series of technical challenges. Many of the techniques and applications for digital twins were not yet available. The researchers therefore had to develop their own.

A large number of projects are currently underway. All of the German car manufacturers, for example, are emphatically pressing ahead with this idea. This is no great surprise because the American car manufacturer Tesla, known for its cutting-edge solutions, keeps a digital twin for each Vehicle Identification Number (VIN), which exchanges data with its real-life counterpart.

Siemens was able first and foremost to present its own factory in Amberg as its credentials since it receives awards with pleasing regularity. The factory is not just a benchmark for a smart factory but also for the implementation of digital twins on a large scale. However, Siemens has decided to use aircraft construction as its application, in which digital twins are already used with great success.

Interestingly, in aircraft construction there is also an example of the use of digital twins from the textile industry. At JEC 2018 in Paris, the DLR (German Aerospace Center) presented innovative technologies for the digitalised production of fibre composite components. The DLR demonstrated in detail how they upgraded the fully-automated process chain for manufacturing fibre composite components using resin-transfer-moulding (RTM) at the DLR site in Stade by adding a digital twin to a cyber-physical system in order to monitor the real-life production through virtual means. To achieve this, research was carried out into the possibilities offered by a dynamic, real-time capable and self-organising production process.

At JEC, visitors were able to dive into the system itself through virtual reality and get an impression of future application scenarios, for example remote maintenance or controlling a system via a virtual control panel. DLR partners and the firm arklgroup were tasked with integrating the technical software of the digital shadow into the system, the latter of which is an interdisciplinary solution provider based in Aachen specialising in made-to-measure mechatronic automation solutions and mobile software applications in, among others, the textile sector.



Another example from the textile industry comes from Adidas. The sports equipment giant has already set a benchmark for modern production and in April 2017 announced a collaboration with Siemens with a view to modernising even further and shortening the amount of time between the design phase and the end product. According to Siemens, just some of the aspects of the collaboration include creating a digital twin for the Adidas Speedfactory, shortening the time-to-market, increasing flexibility and boosting production quality and efficiency. Research for the digital twin of the Adidas Speedfactory is also being carried out at the Institute for Factory Automation and Production Systems (FAPS) in Erlangen.

HIGH-PERFORMANCE SOFTWARE SYSTEMS

High-performance software systems are required to develop these sorts of digital twins, which create the digital twin for the entire length of the value chain - for the planning and design of products, machines and systems as well as for the marketing of products and production systems. All known manufacturers of such systems have adopted a sustainable position in this regard. With the Digital Enterprise Suite, Siemens offers coordinated, integrated software and automation solutions for a holistic approach.

INDUSTRY 4.0 & DIGITIZATION

A central data platform is used to digitise the whole value chain in the industry. Intelligent networks for industrial communication allow data to be exchanged easily within the various modules of the production process and continuously record up-to-date data during operation. Siemens' cloud-based, open operating system, MINDSPHERE, combines products, facilities, systems and machines and makes it possible to utilise the abundance of data from the internet of things (IoT) through extensive analysis. 'By using the insights gained from Mindsphere, we are able continuously to optimise our clients' entire value chains' explains Jan Mrosik, CEO of the Digital Factory Division.

SAP has introduced the SAP® LEONARDO digital innovation system and aims to use it to supply tailor-made innovations that help companies and organisations to transform themselves and release sustainable values in an interconnected, digital and intelligent environment. The SAP Leonardo Internet of Things (SAP Leonardo IoT) also combines things, people and processes and facilitates the necessary realignment of processes and business models for a digital market environment. The features of SAP Leonardo IoT are incorporated in the software of the SAP Business Suite and in SAP S/4HANA®. Thanks to standard-based APIs, SAP Leonardo IoT is open for other business and operating systems. Clients and partners can expand the features of SAP Leonardo IoT and adapt it to meet requirements through the SAP Cloud Platform.

The centerpiece of PTC's Industrial Internet of Things technology portfolio is THINGWORX, and it exemplifies PTC's commitment to IIoT innovation. ThingWorx is comprised of a rapid application development platform, connectivity, machine learning capabilities, augmented reality, and integration with leading device clouds. These capabilities combine to deliver a comprehensive IoT technology stack that enables customers to securely connect assets, quickly create applications and experiences, and innovate new ways to capture value.

With the release of ANSYS® 19.1 software in May 2018 the simulation giant delivers ANSYS® TWIN BUILDER[™], a first-of-its-kind product enabling customers to build, validate and deploy simulation-based digital twins within one workflow. The open solution integrates with any IIoT platform and contains runtime deployment capabilities for constant monitoring of every individualized asset used during operation. The combination of industrial asset connectivity with holistic system simulation, powered by ANSYS Twin Builder, empowers customers to perform diagnostics



INDUSTRY 4.0 & DIGITIZATION

and troubleshooting, determine the ideal maintenance programs, optimize the performance of each asset and generate insightful data to improve the next generation of the products.

In addition to those already mentioned, there are many more solutions from manufacturers such as IBM, Microsoft, C3 IoT, Software AG, Hitachi, GE Digital, Atos, Oracle, Bosch, AWS and Schneider Electric.

Of course, selecting and setting up a software system precedes many of the other tasks in the process of creating a digital twin. Most of these tasks revolve around the structure, availability, organisation, provision and improvement of data. Others concern the processes, especially the development process in the company and likewise the designing of the manufacturing process. A fundamental requirement of this is that these processes are digitised. Support during the implementation of these stages is naturally offered by large and specialised consulting firms, associations and universities. Having a small, interdisciplinary project team to begin with can certainly help to carve out an individual path for one's own company.

WHAT DOES TEXTILE MACHINE ENGINEERING HAVE TO OFFER?

The term digital twin is not often heard in the textile machine engineering sector. The firm Karl Mayer could well be described as a pioneer in this regard. The global market leader in warp knitting looms and weaving preparation machines founded the Karl Mayer Digital Factory GmbH with its headquarters in Frankfurt am Main in 2017. The business group hopes that the newcomer will enable it to build up its digital skills with an agile environment. The overarching aim is to develop new digital solutions quickly and flexibly with perceptible added value for its clients. In April 2018 Karl Mayer entered into the Adamos Joint Venture (Adaptive Manufacturing Open Solutions). The IoT platform set up jointly by Dürr, DMG Mori, Software AG, Zeiss and ASM PT is comparable with the operating system of a computer and records large volumes of data from production processes. In total, Adamos has at its disposal an installed base of 100,000 machines and systems. ADAMOS received the German Innovation Award in June 2018. The innovative joint venture prevailed against 390 competitors in the Business-To-Business competition class.

The Digital Capability Center (DCC) in Aachen offers support in setting up digital twins, including expert know-how for the textile industry. To this end, together with McKinsey, the software manufacturer PTC and other partners, the Institute of Textile Technology (ITA) runs the textile training factory for the future. The DCC is a key facility for the development of skills in a real demonstration and learning environment, as well as a test basis for the piloting and scaling of new digital solutions. It offers workshops for managers and technicians who are responsible for operative processes and the digital transformation within their company.

OUTLOOK

Numerous experts believe that the technology behind digital twins will shortly come to the fore, and that in the near future there will scarcely be a product or a production process that does not have its own binary counterpart. When and how the textile industry, in conjunction with textile machinery engineering, will take up the idea on a larger scale remains to be seen. We can most likely expect the engineering side of things to feature as soon as at ITMA Asia + CITME or at the latest at the next ITMA in June 2019.

INDUSTRY 4.0

DIGITAL FASHION WILL JOGGLE GARMENT PRODUCERS



In hardly any other textile sector digitization has developed so rapidly in recent years as in the fashion industry. Remarkably, this pace is expected to increase. If one speculates on the current state of the development curve of these solutions, which will take place as in all technical innovations in parabolic form, one can assume that they have already arrived in the exponential range. This assumption is supported by the explosive improvements of recent years - especially in the field of IT solutions.

Many companies report extensively on the implementation of digital solutions across the entire value chain, and the best practice directories of major solution providers grow and grow. On the other hand, the same solution providers continue to report that even in the fashion industry many companies are half-hearted or even non-responsive.

Lectra Deutschland Managing Director Holger Max-Lang, for example, remarked at the "Digital Fashion Summit 2018" that most of the responsible people are not aware that all production processes can be completely digitally reproduced, and he demanded that digitization be made a top priority. While sales strategy is always a part in such statements, one can in any case state the gap between the individual apparel companies is diverging with regard to their digital future. Digital is increasingly becoming a major competitive factor, and it's not just about brands and





Gerber's pattern making software AccuMark 2D and 3D Version 11 © 2018 Gerber

2 textile.4U

INDUSTRY 4.0 & DIGITIZATION





3D with Vidya $\ensuremath{\mathbb{O}}$ 2018 Human Solutions

retailers. It also affects the textile production companies and thus the core of the textile value chain. When the textile chain goes digital, it couldn't happen without the textile producers.

This means they have to familiarize themselves with market-leading solutions to stay competitive. At best, before corresponding requests come from their clients. Reason enough to take a closer look at a few implementations and solutions.

FROM CAD/DESIGN TO POS

Let's begin with a short definition of "Digital fashion", the industry' s buzz word for digitization in the fashion industry . Wikipedia says it is 'the interplay between digital technology and couture. Information and Communication Technologies (ICTs) have been deeply integrated both into the fashion industry as well as within the experience of clients and prospects.' Such interplay has happened at three main levels: in design and production of fashion products, in marketing, distribution and sales and in communication activities with all relevant stakeholders.

Of all these processes, the design initially appears as the most important process, because it all starts with the design. The digital image or the digital master of each product forms the basis for use in the further stages of textile production up to the point of sale. Design of fashion or clothing in the computer is an established process, which has been improved again in recent years. All leading software providers offer CAD software, which has 3D functionalities, so that the fashion products can be created directly in the computer. The initial benefits of 3D are obvious: fewer prototypes reduce costs and time-frames.

Of course, criteria for software selection are the range of functions, as well as the learning curve and the usability, although these two are always quite subjective. Also, of great importance are the size and depth of additional information available through connected databases such as fabrics, patterns, cuts, etc.

The use of the data in the further process stages is determined by their quality. You need highest quality, for example, if you want to show fashion pictures in an online shop. Computer-generated images and animations should be as photorealistic as possible, and at the same time should offer digital advantages such as 360-degree view and zoom into details. And, of course, it's critical to a comprehensive digitization strategy to share and process this data with all players involved. And, of course, the possibility to share and process this data with all players involved is critical to a comprehensive digitization strategy.



3D with AccuMark © 2018 Gerber

This concerns presentation but above all production including and in particular interfaces and the support of standards. For companies that do not yet have clear preferences, we are pleased to present a selection of solution providers.

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TECHNOLOGY PROVIDERS

The Human Solutions Group, which consists of Human Solutions GmbH, Assyst GmbH and AVM Solutions GmbH, currently employs more than 200 people at four locations in Kaiserslautern, Munich (both Germany), Lainate/Milan (Italy) and Morrisville/North Carolina (USA). In 2018 the company celebrates its 15th anniversary.

With its Digital Fashionboard, Human Solutions offers a new tool for displaying fashion in the different life phases of a garment. "We want to show how 3D can be used in the entire creation and sales process of fashion," says Dr. Andreas Seidl, CEO of the Human Solutions Group. "Simulating clothing three-dimensionally from an early stage creates clear advantages in product development – but the data can also be used in a wide variety of ways to stage fashion beyond the design process." The Human Solutions Group has developed two different application scenarios for the Digital Fashionboard.

In the design phase the Digital Fashionboard replaces the analog Moodboard. New ideas are the first step on the route to creating an innovative product, and to structure, separate and further process these individual ideas fast, the Digital Fashionboard enables thematic blocks with pictures, sketches or existing designs to be sent quickly through the Internet. The 3D simulation software Vidya can be used on the Digital Fashionboard, giving the coordination of drafts a new quality of efficiency. The unique direct connection between Vidya and PLM GoLive enables and assists the planning of stores and collections. At the point of sale, the Digital Fashionboard can be used as an extended arm of the store counter, turning the collection into a world of experience for the customer. Another novelity of Human Solutions is the Digital Showroom,



Dr. Andreas Seidl speaking at MFS © 2018 Human Solutions



Digital Fashion Board © 2018 Human Solutions

in which people in different locations can plan, view and revise the next collection. Another solution provider, Lectra, has identified connectivity and automation as key to helping fashion companies achieve operational excellence in a new era marked by digitalization. Founded in 1973, today Lectra has 32 subsidiaries across the globe, serving customers in over 100 countries. With nearly 1,700 employees, Lectra reported revenues of \$313 million in 2017. For the latest version of Lectra Fashion PLM 4.0, the company has developed Lectra Easy Connect, a series of pre-configured connectors that allow the solution to interface with other IT systems such as ERP and CRM. These connectors ensure data integrity by facilitating a smooth and consistent flow of data between internal and external supply chain actors.

Gerber Technology offers solutions for the whole fashion business life cycle for planning, design, development & pre-production, sourcing & production, tracking and reporting. The company delivers industry-leading software and automation solutions that help apparel and industrial customers improve their manufacturing and design processes and more effectively manage and connect the

INDUSTRY 4.0 & DIGITIZATION

supply chain, from product development and production to retail and the end customer. Gerber serves 78,000 customers in 134 countries, including more than 100 Fortune 500 companies. Gerber's Digital Solutions include the newest releases of YuniquePLM® product lifecycle management software, as well as AccuMark®, the industry-leading pattern design, grading, marker making and production planning software, AccuMark 3D and AccuPlan™.

The YuniquePLM product lifecycle management software serves as a central repository of critical data, and eliminates problems companies often face when using multiple excel spreadsheets, email or tracking documents to communicate throughout the stages of product development and management. YuniquePLM creates a single version of the truth, connecting a company's creative process with their supply chain and production processes.

Furthermore, it integrates seamlessly with AccuMark® pattern design software.

AccuPlan is a powerful spread and cut planning tool that boosts production efficiencies and bottom line performance by leveraging existing libraries and databases and automating the marker planning process. By automating the planning process, AccuPlan downloads work orders from the ERP system of choice, importing cut work orders and streamlining the entire process all the way from calculating marking and spreading solutions to submitting cut files and cut tickets to the cutting room, significantly reducing operational costs and improving productivity.

"We continue to be focused on making our products easy to try, buy and most importantly easy to use for customers of all sizes," said Karsten Newbury, senior vice president and general manager of software solutions group at the ideation 2017. "The world's leading brands are relying on us to help them through their digital transformation and we are really excited to be introducing so many major product enhancements to AccuMark and YuniquePLM to support our customers."



Connected design and development with Lectra © 2018 Lectra

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Lectra Fashion PLM 4.0 & PLM 4.0 v2 © 2018 Lectra

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INDUSTRY 4.0 & DIGITIZATION

Gerber's Digital Solutions architecture uses common file structures. Data can easily be passed to the cut room where smart machines, like the GERBERspreader™ XLs Series and the Gerber Paragon® line of multiply GERBERcutters, can process the order with a simple barcode scan.

A closed-loop, end-to-end Digital Solution like Gerber's, that integrates software and smart machines, allows companies to automate their entire process and streamline data and workflow necessary to provide insight, maximize throughput, minimize errors and reduce labor costs to be competitive in mass production environments. So much about three of the most important technology providers for moving to digital in the fashion industry.

Of course, there are others like EFI Optitex, GRAFIS, AUDACES or PAD System.

THE FUTURE?

To conclude our short article, we would like to introduce a company being one step ahead in using 3D and digitally. For the unveiling of the pre-fall 2018 offerings, the French fashion label Balmain has used computer-generated 3D models. Among the three models featured across campaign images is Shudu, who has been called the world's first digital supermodel. The digital model was created by Cameron-James Wilson, Photographer and Visual Artist, in the year 2017. Since then, Shudu quickly has become famous via her Instagram profile, which has more than 140,000 followers in October 2018.

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Held from 15 to 19 October 2018 at National Exhibition and Convention Centre (NECC), ITMA ASIA + CITME 2018 is owned by CEMA-TEX and its Chinese partners - the Sub-Council of Textile Industry, CCPIT (CCPIT-Tex), China Textile Machinery Association (CTMA) and China Exhibition Centre Group Corporation (CIEC).

It is organised by Beijing Textile Machinery International Exhibition Co Ltd and co-organised by ITMA Services.

The Japan Textile Machinery Association (JTMA) is a special partner of the show.

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"QUALITY FIRST" **EXPECTED AT THE ITMA ASIA + CITME** 2018

TRANSFORMATION MEETS INNOVATION AT THE LEADING TRADE FAIR IN ASIA

Around nine months before the ITMA in Europe, the ITMA Asia + CITME 2018 is about to throw open its doors, providing Asian textile manufacturers in all relevant segments with an opportunity to gain a first-hand insight into the latest developments in the machinery sector.

ITMA Asia + CITME 2018

China, according to the World Bank the second-largest economy in the world, behind the United States, ahead of Japan, has set itself some ambitious goals in the 13th Five-Year Plan (FYP), adopted in March 2016 by the National People's Congress (NPC). This FYP makes innovation the primary driver of economic development. According to Hong Kong Trade Development Council it also an-





Entrance and fairground at ITMA Asia + CITME 2016 © 2018 TexData International

nounces 'the launch of six key scientific and technological (S&T) projects and nine major projects under the "Scientific Innovation 2030" initiative, as well as the implementation of the "Made in China 2025" strategy for building a strong manufacturing country.'

A recent Government initiative that ideally symbolizes the process of change is the Belt and Road Initiative. This is a significant development strategy launched by the Chinese government in March 2015, with the intention of promoting economic co-operation among countries along the Belt and Road. The Initiative intends to further market integration and create a regional economic co-operation framework. It aims at further deepening and expanding mutually beneficial co-operation in areas such as trade, investment, finance, transport and communication. Latest economic facts and figures show that economic growth in China remains very high at 6.8%.

However, the share of exports is not as high as it was a few years ago. It's no secret China wants to transform to a consumption driven economy. Chinese President Xi Jinping has emphasized this transition as a key to achieving "high-quality development." One element to achieve this is lowering the import tariffs.

In November 2017, the country cut import tariff on 187 consumer goods, the tariffs drop from an average 17.3% to 7.7% on products including pharmaceuticals, food, health supplements and clothing. From 1 July 2018, China will further reduce tariffs on 1,449 items, from an average tariff rate of 15.7% to 6.9%; and lower import tariffs on vehicles (from average 21.5% to 13.8%) and auto parts (from average 10.2% to 6.0%). According to HKTDC, President Xi Jinping announced during the Boao Forum in April 2018, that China also decides to adopt a series of new significant measures in expanding its opening-up. These measures include broadening market access, enhancing alignment with international economic and trade rules, strengthening protection of intellectual property rights and lowering imports tariffs.







Press conferences at ITMA Asia + CITME 2016 © 2018 TexData International

<u>CHINA NO. 1</u>

According to International Monetary Fund, China has the largest foreign currency reserves as of December 2017, reaching USD 3,140 billion and according to the World Trade Organisation (WTO), China was the world's largest exporter of merchandise trade in 2017 (up from the 11th in 1995), reaching USD 2,263 billion.

Of course China is still the uncontested leader of the textile manufacturing and export industry and plans to press ahead with the transformation of the high-tech sector initiated already in the 12th FYP and to manufacture not only the most, but also the best textiles in future.

This will, of course, alter China's global competitiveness in the high-end and premium segments – particularly with respect to Europe. However, it is almost more important for China to increase its production of premium merchandise for its own domestic market.

This is true in the case of clothing for an already sizeable and growing middleclass section of the population as well as high-quality technical textiles needed for making improvements in other industrial sectors or in the field of environmental protection.

Back to the fair. Some 1,700 local and international textile machinery manu-

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facturers from 28 economies have applied to exhibit at the sixth combined show, snapping up all of the available 170,000 square metres gross of exhibition space to showcase state-of-the-art machinery, as well as products that boost automation and energy-saving features. Due to this overwhelming response, additional space at the North Hall (NH) at NECC has been booked.

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With the additional space, the sector allocation plan has been revised to accommodate more exhibitors. Chinese manufacturers take the largest area, followed by Germany, Italy, Japan and Switzerland. Sector-wise, spinning machinery forms the largest sector.

This is followed by finishing and knitting, dyeing, weaving and nonwovens. Said Mr Wang Shutian, President of China Textile Machinery Association (CTMA): "Interest in the combined show remains extremely strong, especially from Chinese textile machinery manufacturers. As China's textile industry continues its transformation, the demand for advanced machinery and technology is on the rise."

The strategy for Chinese textile producers is clear-cut and unwavering. Now it is all a matter of implementation, and the ITMA Asia + CITME 2018 is soon destined to provide the Chinese textile industry with an excellent opportunity to take the next step.

100.000 VISITORS EXPECTED

STRAHM

It is expected to attract a trade visitorship of around 100,000 from around the wor-Id. "We are looking forward to welcoming large numbers of visitors from both inside and outside of China to the combined show, and we would like to encourage our visitors to plan their trip early and purchase their badge online now to beat the onsite queues," said Mr Fritz P. Mayer, president of CEMATEX.

www.autefa.com

TEXTILE BUSINESS NEED TO EVOLVE

What is somewhat loosely referred to in economics as "transformation" can pose a major challenge to individual businesses. One thing for sure is that rising wages make it increasingly difficult to engage in mere price wars.

ITMA Asia + CITME 2018





Boothes at ITMA Asia + CITME 2016 © 2018 TexData International

Hence, individual textile companies will need to realign themselves, think forward, seek other lucrative segments and press ahead with specialisation - either in the export market or the domestic market, where purchasing power has been boosted by the rise in wages. A slight reduction in quantity in exchange for greater specialisation and improved quality is what will be demanded of the textile industry in future. The realignment process will require many companies to re-equip their machinery park with the latest market-leading technology. So much for the situation in the run-up to the fair and the event organisation. Let's now take a look at the key elements - the exhibitors and their machines.

ONLINE BADGES

Special rates are available to visitors who purchase their badge online. Online visitor registration will close on 13th October 2018. The early bird badge rates are RMB 60 for a five-day badge and RMB 30 for a one-day badge. The standard badge rates cost RMB 100 for a five-day badge and RMB 50 for a oneday badge. For added convenience, visitors may print their badges after successful registration.

This time-saving feature further helps visitors to avoid possible long onsite queues during the show.

www.itmaasia.com www.citme.com.cn

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OERLIKON LEADS THE WAY TO **DIGITAL YARN FACTORY**

"From Melt to Yarn, Fibers and Nonwovens – Bring it to Life" – is the motto under which the Oerlikon Manmade Fibers will transform itself into a digital machinery and plant manufacturing company.



,BRING IT TO LIFE' is the Oerlikon motto at the fair © 2018 OERLIKON Manmade Fibers Segment

En route to the digital yarn factory, technologies such as artificial intelligence, machine learning or new Human Machine Interface solutions promise the bridging between material and data flow – for customer value. These topics are also the central point of the "Oerlikon Innovation Forum" at which presentations in English and Chinese will be held several times a day for visitors of the exhibition booth.

FACTORY 4.0

The scenario of the future: textile production – from the supply chain through to dispatch – is autonomously controlled in the fully-networked Factory 4.0. The product being created controls and monitors the processes itself using embedded sensors. The manufacturing or order status is known at all times, raw materials are automatically reordered, wear and maintenance are planned as integral parts of the production process and error processes are identified, alleviated or displayed. This should cut costs, convert production lines more flexibly and help reduce downtimes and waste. For this, the machine construction sector has to provide correspondingly intelligent and Web-enabled production systems.

"We want to become the textile machine construction trendsetter for technologies of this kind," says CEO Georg Stausberg. The first steps on this journey have already been taken. The Plant Operation Center (POC) for process monitoring enables the collation of existing production data in a central location and to make these data available.

AIM4DTY: AUTOMATED DETECTION OF ERROR CAUSE

The digital future solution AIM4DTY provides help with the identification of possible error causes in texturing machines to help reduce quality risks.

Here, machine learning is being used: The system recognizes and is being "trained" using trend charts and their respective errors. An example: In the texturing machine, the UNITENS monitoring sensor continually measures the yarn tension at all positions. An error is generated if a measurement value does not lie within the prescribed tolerances. With the automated solution AIM4DTY analysis and optimization information is instantly available to customers, therefore allowing them to immediately optimize the quality during running production. It also ensures that predictive maintenance is now a reality.

WIPING ROBOT WITH INTELLIGENT CONTROL SYSTEM

The crucial advantage of the wiping robot used for the cleaning of the spinnerets is automation: intelligent control system which connects machines and processes. The information relating to all wiping positions, cycles and times can be saved in the management system. The robot accesses the saved wiping intervals in an automated and safety-relevant manner. To this end, the robot can cope with up to 48 positions, corresponding to one entire production line. However, more decisive here is the impact of the intelligent control system, with whose help the spinning pump can be moved up and down in an automated and 'in-time' manner.

WORLDPREMIERE: STAPLE FORCE S1100

The Staple FORCE S1100 is a one-step plant, which spins, draws, crimps, cuts and bales in a single process step, produces small batches (up to 15 tons per day) and can be swiftly reconfigured for various requirements, including polymer, dye and titer changes. Its process control system for easy operation is absolutely unique.

NEWS FROM THE PA6/66 SECTOR

With the acquisition of the PE Polymer Engineering Plant Construction, Oerlikon Manmade Fibers Segment expanded its now completed polyamide process chain for fibers and filaments. The technologies in the melt preparation process include the entire polyamide 6 polycondensation systems division and its PA6/66 co-polymer and the patented dimer-hydrolysis procedures for feeding recycled-lactam with the very highest end-product quality.

EN ROUTE TO DIGITIZATION WITH A NEW MINDSET

To show its direction towards digitization, the company wants to offer its visitors alongside machine exhibits mostly virtual experiences. They will be deploying playful solutions to present the topic of artificial intelligence as well as a virtual showroom to allow visitors to experience complex systems live in 3D.



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Oerlikon Innovation Forum in hall 2, B24–

come and see

Daily

Bring it to Life

From Melt to Yarn, Fibers and Nonwovens

Oerlikon Manmade Fibers Segment with the product brands Oerlikon Barmag and Oerlikon Neumag is the world market leader for filament spinning systems, texturing machines and BCF carpet yarn, staple fiber spinning as well as nonwovens solutions. Oerlikon Manmade Fibers Segment welcomes you to the ITMA ASIA + CITME 2018 in Shanghai, China, October 15-19, 2018 in hall 2, B24.

For further information visit us at **www.oerlikon.com/manmade-fibers**





neumag

ALL TRÜTZSCHLER DIVISIONS WILL EXHIBIT **CURRENT AND NEW PRODUCTS**

TD 10 - THE NEW TRÜTZSCHLER AUTOLEVELLER DRAW FRAME

ITMA ASIA marks the launch of the new Draw Frame TD 10. It features increased compactness and has a highly modern regulating system. This results in a significant increase in control dynamics and an improvement in sliver quality. Despite 20% less space requirement, it was possible to increase the filter once more. The intelligent SMART CREEL in combination with T-LED offers an unprecedented level of functional reliability and more comfort for the operator and mill manager. Machines connected to T-Data allow a real-time quality monitoring.

TC 15 - BENCHMARK IN PRODUCTIVITY

A whole range of individual measures ensure performance increases compared to the predecessor machine. In addition to high productivity, the 1.28 m wide Card TC 15 stands for increased sliver evenness and improved running behaviour. Trützschler will demonstrate the high flexibility with five different sliver coiling systems on the stand.

TC 10 THE MOST SUCCESSFUL **CARD IN CHINA**

The Card TC 10 in the traditional working width of one metre has been specifically designed for the Chinese market. Made in China – for China.



TC15 © Trützschler



T-MOVE SPACE SAVING AND **INCREASED EFFICIENCY**

The can filling station does more than just save space. The new moving head allows a can change at high delivery speeds. This improves card efficiency. T-MOVE is also designed for JUMBO CANS with 1,200 mm diameter.

T-SCAN - HAND IN HAND FOR **HIGHEST SEPARATION RATES**

In the Foreign Part Separator T-SCAN TS-T5, five detection technologies ensure an all-time high separation efficiency.

IDF-VORTEX - SHORTENED PREPARATION SYSTEM FOR **AIR-JET YARNS**

In cooperation with Murata, the leading manufacturer of air-jet spinning machines, Trützschler has developed a new sliver preparation technology. When processing viscose, two of three draw frame passages can be eliminated. This represents an enormous economic advantage.

T-WIND - SEMI-AUTOMATIC SURFACE WINDER TWW-SD

Robust master roll winders are used when the production of ready-for-sale rolls is decoupled from the nonwovens production. two-stage configuration The with



GX-1 and NOVOTOP 30 © Trützschler

downstream unwinding, slitting and winding increases process stability. The Surface Winder TWW-SD provides an appropriate solution for spunlace systems, for a variety of thermal bonding processes as well as for technical nonwovens. Winding of master rolls up to 1,800 mm diameter and system speeds up to 300 m/min can be realised.

GX1 THE CYLINDER CLOTHING THAT NO LONGER REQUIRES GRINDING

The new GX1 clothing has been specifically developed for all spinning processes in the area of cotton. Improved fibre guidance results in less short fibre content and significantly better nep separation. The clothing is basically maintenance-free, but can also be ground when required.

NOVOTOP 30 THE VERY SPECIAL FLAT CLOTHING

NOVOTOP 30 has been newly developed for the processing of coarse and/or dyed fibers and reclaimed fibers for rotor spinning. It is ideally suited for use with yarn counts below Ne 10 and realises high production speeds. Available as MAGNOTOP and CLASSICTOP.



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RIETER SHOWS NEW MACHINES

With the new Digital Spinning Suite platform, Rieter makes it possible to operate and control spinning mills with just a few clicks. It visualizes potential improvements at a glance, offers flexi-ble and accurate functionality and is open to third-party applications. It will be presented with the rotor spinning system. In 2019, it will also be available for ring, compact and air spinning systems. From mid-2019, UPtime and SPIDERweb will also be migrated to the Digital Spinning Suite.



Ring spinning machine G 37 © Rieter

UPtime optimizes the maintenance of spinning mills in terms of predictive maintenance. Based on the monitored parameters and big data analytics, the system collects performance-critical data, identifies deviations including causes and indicates potential future errors or even failures.

Furthermore, Rieter launches the ring spinning machines G 37 and G 38 and the compact-spinning machines K 47 and K 48. The 8 series machines are ideal for markets where staff availability is limited and the requirements for flexibility and yarn quality are particularly high. With these all- inclusive models, customers get the benefit of the highest degree of automation, top performance and complete flexibility for standard and special yarns, based on an electronic drafting system drive, the integrated individual spindle monitoring system ISM premium and the integrated slub yarn device. The 7 series machines were designed for markets where the shortage of personnel is not an issue.

The new LENA spindle, which is availa-ble as an option, facilitates further significant energy savings with the four new models. The compacting system "EliTe® Compact Spinning System" is available as an option on the ring spinning machines G 32, G 37 and G 38. And in the field of spinning preparation the autoleveler draw frame RSB-D 26 celebrates its premiere.

Good Better Premium





SSM TG30-ETC

The SSM GIUDICI TG30-ETC is a multifunctional machine offering the combination of false-twist texturing and air-texturing in one process step. The standard execution includes a double-slub fancy device, Elastane feeding and autodoffing system.

www.ssm.chFalse Twist TexturingAir Texturing



24 textile.4U

GRAF + CIE. SHOWS

Graf (Switzerland), the leading supplier of clothings for flat cards, roller cards and combs for combing machines, will show its wide portfolio of solutions for the spinning and fiber preparation process.

Ri-Q-Comb flex, the innovative circular comb series with adjustable height for up to 20% lower imperfections. The new top combs FIXPRO C35 and C40 will be presented for the first time at an international trade fair. With 35 or 40 teeth respectively, nep values can be improved by up to 30%.

The EasyTop System of flat clothings stands for optimal settings of the carding gap and reduces the loss in good fiber. In addition, the handling of flat clothing replacement is much easier and can be done without special equipment.

The reputable product line of flexible flat clothings, well-known by the brand names resist-O-top or InLine-X-Top, stand for better quality in combination with higher lifetime. Besides the applications on display, Graf provides a wide range of solutions in the carding-, combing- and nonwoven-processes.

NOVIBRA SHOWS BENEFICIAL SOLUTIONS

Novibra (Czech Republic), trend setter in spindle technology and the biggest spindle producer worldwide, present the latest innovations in spindle technology.

LENA: The energy saving spindle LENA has been designed for the highest speeds with the main goal of achieving lower energy consumption. It features Novibra premium double damping system for minimum neck bearing load and the unique LENA spindle bearings with 5,8 and 3 mm diameters only. As a result the lower friction of the bearings and reduced spindle wharve diameter bring an energy saving in the average of 4 to 6%.

CROCOdoff and CROCOdoff Forte: The new generation of clamping crowns, introduce genuine doffing without underwinding. The crowns work automatically depending on the spindle speed change and therefore, there is no significant adjustment on the machine needed. The major advantages are lower after doff end down rate and minimized fiber fly; leading to reduction of maintenance costs, waste and due to reduced air friction also of energy consumption.

BRÄCKER INNOVATIONS INCREASE **PRODUCTION OUTPUT**

Bräcker (Switzerland), leading manufacturer of key components for ring spinning machines, will present the latest innovations.

The surface treatment of the ONYX travellers facilitates a higher efficiency. The improved gliding characteristic allow for an increase of the spindle speed by up to +1000 rpm and prolongs the life of the traveller by up to +50%.

The large contact surface between SFB traveller and ORBIT ring allows for increased spindle speeds even with fibers like Viscose or with fibers, tending to thermal damage, e.g. Polyester. Higher traveller speeds of 10 - 20% are achieved compared to the T-flange ring / C-shaped traveller system. To cover the new demands, the SFB traveller portfolio was substantially expanded in regards of traveller profiles and weights.

BERKOL® ALL IN ONE GRINDER

The entire range of top rollers and long cots used in a spinning mill can be processed on only ONE single machine. Any execution of center guided top roller is ground fully automatically on the BER-KOL® multigrinder.

SUESSEN FOCUSING ON EFFICIENCY & PROFITABILITY

Suessen, the leader in compact ring and open-end rotor spinning technology, will demonstrate the competence in handling and processing natural and man-madefibres.

The new EliTe®: The world's leading, most utilized and versatile compact spinning system with new innovative components further boosting productivity and yarn quality. For existing installations, Suessen offers upgrade packages to enable the customers to participate in the benefits of the latest developments and innovations. The EliTwist®Spinning System combines compact spinning and twisting of a plied yarn in one single production step, representing the most economical way to produce two-ply yarns.

The HP-GX Top Weighting Arms for short staple, roving and worsted spinning machines are equipped with finely tuned heavy-duty plate springs for frictionless load transmission. The HP-GX 3010 in combination with ACP Quality Package (Active Cradle with PINSpacer NT) reduces IPIs in cotton spinning up to 60% and Uster CV% up to 15%.

SAURER INNOVATES THE VALUE CHAIN OF SPINNING

Saurer Spinning Solutions, the specialist in staple fibre processing from bale to yarn, is showcasing an abundance of innovative new products, from the new card to new ring spinning and winding machines featuring the latest technology. Also included are 'senses', Saurer's digital control and analysis tool, as well as quality assuring components.



To be exhibited on the show: The new SAURER Zinser Impact 72XL and the SAURER Schlafhorst Autoconer X6 © 2018 SAURER

PRE-SPINNING: SAURER'S NEW CARD J328A – EXCELLENT SLIVER QUALITY

The carding machine JSC 328A follows the structure of the main carding area of the JSC 326. Several new technologies, such as metal detection, quick-stopping and a self-cleaning function of sliver detection devices, form part of its design. The unique three licker-in design helps remove very tiny trash particles from high-impurity raw material more efficiently and improve the silver quality significantly. The powerful performance of JSC 328A will result in a great improvement of spinning mills' product quality and create immense value for customers.

RING SPINNING: ZINSER 72XL

The new Zinser 72XL is a highly productive ring and compact spinning machine for large spinning mills, with the new benefit of maximum flexibility in the areas of fancy and special yarns.

With an incredible length of up to 2,016 spindles, it offers high consistency in quality thanks to its new FlexiDrive central drive. It features energy-saving technologies such as TwinSuction and OptiSuction as well as numerous personnel-saving details and customised automation. Premiering at ITMA Asia, the new ZinserImpact 72XL compact spinning machine is equipped with the new generation of the self-cleaning Impact FX unit combined with a new flow-optimised suction tube.

WINDING: AUTOCONER X6

The revolutionary Bobbin Cloud can take you to the next level. This RFID-based advanced material flow system ensures maximum flow rates, maximum process reliability and minimum personnel requirements. With a quantum leap in process automation, Autoconer X6 opens up a new dimension of efficiency with smart technology: The new, E3-certified generation offers sensationally low resource consumption, palpable productivity advantages and even more ergonomic handling (i.e. SmartJet, SmartCycle, SPID, Launch Control, Power on Demand).

TEXPARTS – BETTER YARN QUALITY AND HIGHER PRODUCTIVITY

Texparts is presenting two new products. The new high-speed ring of 100Cr6 ball bearing steel offers optimal running behaviour with perfect roundness and evenness, allowing the highest speed with fewer yarn breaks and less downtime. The new yarn underwinding system has an advanced seal to lock out dust and is practically maintenance free. It also offers excellent cutting performance for special yarns such as Lycra.

ROTOR SPINNING: AUTOCORO 9 AND BD

Achieving previously unattained rotor speeds of up to 180,000 rpm and with up to 720 spinning positions, the Autocoro 9 delivers highly productive technical superiority. At the same time, intelligently automated processes increase machine performance and reduce the major costs associated with spinning. Raw material and maintenance costs can shrink by up to 60% and energy costs by up to 25%.

The semi-automatic BD 7 machine is also in a league of its own. It offers convincing performance with all package sizes up to 320 mm diameter due to cross-wound packages in Autocoro quality and integrated digital package quality control. The BD 7 reduces spinning costs and increases profitability with energy consumption savings of up to 10%. It also boasts new time-saving and operator-friendly machine features as well as rapid take-off speeds of 230 m/min for all machine lengths.

NEW CONTROL CENTRE 'SENSES'

Senses is an innovative control and analysis tool that furnishes textile companies with digital senses for more profits along the textile value chain. The innovative Big Data system collects, aggregates and analyses the production, quality and machine data of the entire textile fabrication process across all locations. Senses will be shown to the public for the first time and visitors will be able to follow live machinery data on tablets and mobile phones.

SUN – SERVICE UNLIMITED

SUN will demonstrate their promise: "We keep you competitive".





Due to its intelligent concept, the TWIN version is compact and requires little space.

Is it possible to achieve maximum economic efficiency and reliability in the smallest of spaces?

The answer is a definite Yes when it comes to our new TWIN breaker Draw Frame TD 9T. It is a twin draw frame, but also available as single TD 9 version. Thus it is possible to implement each even and uneven number of drawing heads.

For the first time in short staple spinning, it also features a new can format: JUMBO CANS with 1,200 mm diameter reduce the number of can transports and significantly improve the efficiency of the downstream machines.

Getting fibers into shape – since 1888.



REINERS + FÜRST PRESENTS ITS TURBO RINGS & TRAVELLERS

The latest generation of TURBO spinning rings provide excellent results especially for Compact and Siro-Compact yarns. Since the introduction of this further milestone by leading German ring and traveller manufacturer R+F more than 25 Mio units of TURBO rings have been installed and contribute to the customers' success. The enhanced surface allows increasing machine efficiencies by up to 10% – especially when producing yarns of sensitive fibres or with highest spindle speeds.

Managing Director at R+F, Mr Benjamin Reiners said, "The new TURBO rings with benefits including low yarn hairiness, longer service life and increased machine efficiency by up to 10% are extremely beneficial for the demanding Chinese spinners."

"We have been in the Chinese market since more than 25 years and R+F products are well accepted by the textile industry. We are overwhelmed by the positive feedback for TURBO rings by Chinese spinners," Mr Reiners added. Reiners + Fürst will also present new ring travellers for 100% Viskose, as well as Modal, Micromodal und Tencel. The endusers benefit from low yarn hairiness and longer traveller service life.

World-wide R+F customers achieve highest efficiencies of the ring frames benefitting from unique traveller surface treatments for optimized spinning conditions of each application.

Customers especially value the professional service and support R+F is providing particularly for finding solutions of increasingly complex applications.



Latest TURBO rings and enhanced travellers will be presented at the show

© 2018 Reiners + Fürst

SSM SHOWS NEW MACHINES AND APPLICATIONS

Swiss based Schweiter Mettler AG will show the latest applications at ITMA Asia. Based on the experience accumulated, the inventor of the electronic yarn traverse system is able to provide a proper solution for the most economical and flexible yarn production.



WORLD PREMIERE OF THE NEW DRUM WINDER

After the successful introduction of the XENO-platform in 2016 and the X-Series in 2017, SSM has extended the range of applications on these platforms. With the brand new drum winder the power consumption per spindle is lower than ever (down to 35 watt, depending on parameter settings). The small pitch and integrated control cabinet maximize the space utilization.

Thanks to the new developed and single controlled motor, it is the ideal machine for an energy efficient rewinding of cones used in the weaving, warp knitting and circular knitting process. The new drum winder, named CWX-W, is also available for assembly winding as CWX-D.

In the top quality segment, SSM customer can now benefit from a wider range of applications, such as fancyflex[™] options for the production of slubs and thick & thin effects, controlled overfeed variations, creation of "neps" and intermittent intermingling of drawn textured yarn (DTY). Another benefit is the maximized productivity and profit, when using the DIGICONE® 2 for the XENO-platform to increase the dye package density with unchanged dyeing recipes.

Last but not least SSM is exhibiting the winding machine for the preparation of low-density muffs made of high-elastic yarns, which enables to preserve the highest possible residual elasticity of the yarn throughout the dyeing process.



LOEPFE BROTHERS PRESENT **INNOVATIONS IN YARN QUALITY CONTROL**

Loepfe will present a comprehensive portfolio of quality control solutions for the textile industry. This will include the well-known YarnMaster ZENIT+ for winding and the WeftMaster FALCON-i for quality control of high-tech materials.

Various innovative solutions in different areas of yarn quality control will be shown to ensure an interesting visit to the Loepfe booth for all visitors. New measuring results of the highly precise YarnMaster ZENIT+ OffColor feature collected in cooperation with a customer will be available. The case study shows impressive results in detection of shade variations in polyester.

The increasingly popular yarn defect sensor WeftMaster FALCON-i will also be displayed. After the growing demand noticed from North America, Loepfe sees a similar growth in the Asian market for reliable yarn quality control of latest high-tech materials such as carbon fibers, monofilaments, multi-filaments as well as spun yarns in all material compositions. The optical yarn defect sensor removes smallest knots, fluff, filamentation, thick

places and capillary breaks before being interwoven into the fabric.

The sensor is being used more and more for safety-critical applications such as fabrics for airbags, tire cords, filtration materials, architectural fabrics and sailcloth where quality requirements are very high.



FALCON-I © Loepfe

With Swiss precision, Loepfe works systematically on its revolutionary laboratory test instruments. The focus during the ITMA Asia will be on the YARNMAP which provides a tremendous increase in yarn testing efficiency with regard to time, space, maintenance and operator attendance. All kinds of short and long staple yarns are tested fully automatically while, at the same time, preparation products of the spinning mill can be tested on a second measuring sensor.



BREAK-THROUGH INNOVATION WITH AN ECO-GREEN A QUANTUM LEAP FORWARD IN AUTOMATIC WINDING. INTRODUCING AN ENTIRELY NEW CONCEPT WHICH REMOVES THE EXISTING STRUCTURAL LIMITATIONS OF CONVENTIONAL MACHINES



SAVIO MACCHINE TESSILI S.P.A. 33170 PORDENONE (Italy) Via Udine, 105



THE TEXDATA MAGA7INE

ENERGY SAVING AND INDUSTRY 4.0 WINDING SOLUTIONS BY SAVIO

Savio will exhibit energy saving and industry 4.0 solutions in the winding segment: Polar Evolution and Eco PulsarS, plus an industry 4.0 corner.

Polar winding machines have been recently developed to the Evolution series, gathering all the innovative solutions in terms of technology, efficiency, quality output and maintenance. A further step for Polar family to catch the world of I.T. connectivity and the new fibers applications. The machine on display will be a round magazine feeding one, provided with an efficient and fast automatic doffer.

Eco PulsarS winding machine, with its sustainable eco-green advantage, replies to the market demand of energy saving, including room air conditioning, together with improved production performances, high quality packages and utmost automated solutions. EcoPulsarS's solution of the "individual and independent suction unit per spindle" represents a real break-through versus the conventional system. Reduction of noise is another key aspect.

AUTOMATION - LINK SYSTEM

The Savio Direct Link System (I/DLS) solution, for linking the ring spinning frames (RSF) to the winders, enables a fast and efficient direct feeding of bobbins, along with the full interfacing flexibility with all kind of RSF. It has been designed in a "modular type" granting the possibility of reaching the highest number of winding heads, to match the trend with longer and longer machines up to 2.000 spindles.

Eco PulsarS © SAVIO

SAVIO WINDER 4.0

Savio winding machines can be equipped upon request of Smart Industry Solutions for connectivity, data management, remote machine set up and operator real-time interactivity. Savio Winder 4.0 represents an important step towards a wide digitalization process, being a solution for intelligent networking of machines in the spinning/winding room.



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30 textile.4U

CHINA TURNS INCREASINGLY TO **SUPERIOR QUALITY** WEAVING MACHINES FROM DORNIER

Lindauer DORNIER (LiDO) reports a high-tech boom in China as well as more and more Chinese textile companies are choosing its weaving machines in order to meet the growing demand for high quality technical fabrics for aircraft parts, filters, automotive and safety textiles. The German technology leader will exhibit the world's most advanced weaving technology for producing high performance fabrics.

Audacious investment objectives, rising wages, enormous funds for research and development (equivalent to about 226 billion euro in 2017 alone) and emerging aspiration towards quality: China's evolution from the overflow production facility for the West into a high-tech industrial powerhouse in its own right shows no signs of flagging. This trend is also reflected strongly in the Chinese textile industry, and is being monitored attentively at LiDO.

"China has always been an important market for us, but since the demand for higher quality textiles has also begun to grow, it has become our biggest market", says Wolfgang Schöffl, Head of Business Unit Weaving Machines at DORNIER.

In China, LiDO weaving machines are used to create fine scarves and elegant women's apparel from cashmere wool and silk as well as intricate airplane parts from carbon fibers. The growing global market for technical textiles is supplied with special coatings, airbags, tirecord and filters as well as much else which is manufactured in the Middle Kingdom on weaving machines from DORNIER. And the volume of these high-performance fabrics required just to satisfy China's domestic demand is enormous.

FLAWLESS PROCESSING OF HIGH-PERFORMANCE FIBERS

Let us consider filtration, for example: The fact that the Chinese city of Xi'an cleans its air with the tallest anti-smog tower in the world (100 m) is convincing testament: cleaning air and water is a major concern in China. And this is one reason why DOR-NIER in Shanghai – for the first time ever in Asia – will exhibit its new P2 rapier weaving machine in its most powerful configuration (Type: TGP). This machine is able to bring a reed beat-up force of up to five tons for producing wide, seamless fabrics for high density air and water filters. "The textile is exposed to exceptionally high forces specifically for wet filtration; seams are weak spots, which should be avoided if possible", explains Schöffl.

It is no coincidence that the rising sales of weaving machines from the shores of Lake Constance are closely linked to Chinese demand for high-performance fabrics both domestically and for export: The weaving machines from DORNIER have represented the gold standard for flawless processing of high-performance fibers such as carbon, glass fiber and aramid for over 60 years. "The greater the volume of high-quality fabrics China manufactures, the more weaving machines we can send them", says Schöffl. At the same time, the division head continues, besides the technical quality the company's Chinese customers also value LiDO's aftersales and training services, ease of contact and fast response times.

An air-jet weaving machine for manufacturing car upholstery and an airbag weaving machine (VANDEWIELE stand) will also be on display.



STÄUBLI WORLD PREMIERE IN WARP BEAM PREPARATION

Stäubli Textile' s range of products covers solutions for weavers and knit-ters including a world premiere in warp beam preparation. At Booth E01 in Hall 3, weavers will learn about innovations in weaving preparation and see high-speed shed formation solutions for all sorts of woven applications in action. Carpet weavers will see brand new pattern samples that impressively demonstrate Stäubli's innovative binding technologies. At Booth D14 in Hall 4, knitters are invited to meet with Stäubli knitting specialists and observe the latest automation device in action - it drastically shortens the sock knitting process.

WORLD PREMIERE IN WARP BEAM PREPARATION

With its SAFIR automatic drawing-in machines, Stäubli has made a name for itself as an advanced solution provider for reliable automation in weaving preparation for the widest range of applications. Visitors will now see a further development: the SAFIR S30 set up especially for handling filament yarns. Featuring a new 16 frame/rod capacity, this setup is ideal for high-density warps with fine filament yarns. The SAFIR product range features state-of-the-art AWC (active warp control) technologies such as double-end detection, colour repeat, and S/Z-yarn management. These technologies are the result of continuous research and development driven by Stäubli's values such as the vision to provide innova-tions that deliver further advantages to customers. This spirit of innovation has now led Stäubli once again to go one step further in the warp preparation process:



BEAMPRO yarn repeat reading-in machine © 2018 Stäubli:

As a world premiere at ITMA Asia, Stäubli will unveil the new BEAMPRO yarn repeat reading-in machine, an automation aid at the sizing machine for sizing coloured warp sheets. Visitors can learn more about this weaving preparation solution at the show.

FRAME WEAVING SOLUTIONS FOR WATER-JET APPLICATIONS

As another novelty, Stäubli will be presenting its latest high-position rotary dobbies for water-jet applications, the S2658 and S2678 series. The S2678 will be on display in combination with the new de82/83 harness motions for high mounting, featuring an ingenious design incorporating valuable features such as maintenance-free bearings. In addition, Stäubli's S1300 and S1600/S1700 series of cam motions will also be exhibited. These machines are available for highspeed weaving using every type of weft insertion system.

JACQUARD WEAVING – LARGE FORMAT APPLICATION ON DISPLAY

Visitors will see two complete Jacquard installations featuring different kinds of weft insertion. These installations are equipped with the LX and LXL Jacquard machines, designed for the production of terry and large-format clothing fabrics. Dedicated to large formats, the LXL setup is equipped with 19,584 harness cords (format of the machine exhibited is 10,240 hooks). The display will show the heavy payload capacities of this machine when weaving dense clothing fabrics. The LX setup (format of the machine exhibited is 4,096 hooks) will be shown producing terry fabric, operating 6,652 harness cords with two repeats. At the two-level booth, visitors will be able to observe the precise operation of these machines also from above. A DX Jacquard machine also will be shown demonstrating the broad range.



Stäubli: LXL © 2018 Stäubli

For name selvedges two different examples will be shown: the CX 172 and the UNIVALETTE electronic Jacquard machine. The latter features individual warp-thread control.

In the carpet sector, exclusive samples woven on ALPHA carpet weaving systems will be shown, exhibiting binding technologies and patterns ranging from extra-high-density carpets with traditional patterns to ultra-modern designer carpets. And last but not least Stäubli will be showing the recently launched D4S device on two circular knitting machines. This automation solution allows closing the toe of the sock directly on the knitting machine.

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ITEMA EXHIBITING TWO BRAND-NEW WEAVING MACHINES AND BREAKTHROUGH WEAVING INNOVATIONS

A total of 15 Itema weaving machines will be on display, of which 6 in Itema booth and the rest in partner booths across Hall 3. Absolute stars of the Itema machines' line-up will be two brand-new rapier machines.

ITEMA R9500²DENIM: TO MAKE ITS DEBUT IN CHINA

The 2nd generation of the Itema denim-dedicated rapier weaving machine, the R9500² denim will be exhibited for the first time in China for the benefit of Asia-Pacific weavers. Launched in April 2018, the Itema R9500² denim already became the success case of the year, amassing interest and requests from all over the world. ITMA Asia visitors will see first-hand the extraordinary advantages provided to denim weavers by the R9500²denim. Unparalleled cost savings, superior fabric quality and outstanding user-experience are the key words of the R9500²denim which features breakthrough devices and enhanced skills guaranteeing an unrivalled competitive advantage in the market to denim mills. Saving is the crucial point of the R9500²denim. Not only the optimization of the main mechanical components allows a considerable energy consumption reduction but the machine is equipped with the iSAVERTM, a revolutionary device, never-before-seen in the industry, that eliminates the waste selvedge on the left-hand side of the fabric thus leading to unparalleled savings.

The R9500²denim is produced with the same quality guarantee in Italy and in China, guaranteeing the fastest time to market and the same excellent machine to worldwide customers.



itema R9000²DENIM © itema

ITEMA R9000²: PRESENTED TO THE WEAVING WORLD FOR THE FIRST TIME

Produced and assembled in the Itema manufacturing plant in China, the R9000 comes in a fully revamped version by borrowing some of the latest 2nd Generation technological advancements implemented on the Itema R9500²denim.

The R9000² offers tangible and substantial benefits for the weaver. In fact, the R9000² has been implemented with optimized components and mechanical highlights leading to significant energy saving and performance improvements compared to the previous model. Moreover, the new machine's ergonomy guarantees an outstanding user-friendliness by facilitating machine accessibility for the weaver when carrying out daily textile operations and the Itema Electronic NCP - New Common Platform - comes here loaded on a high-performance, super sensitive touch-screen console. The R9000² on show at ITMA Asia – weaving a fashion apparel style - is equipped with the Itema FPA - Free Positive Approach weft transfer which - due to no guiding elements in the shed - ensures superior versatility. Furthermore, the R9000² will run with the Stäubli dobby 2678 providing enhanced speed and superior machine's performances.



itema R9000² © itema

The R9500terry, the champion of the worldwide high- end terry weaving market will weave a heavy bath mat style to show its unparalleled textile versatility and superior fabric quality.

Last, but not least, Itema will showcase the R9500 in the widest weaving width of its range, 540cm. The continuous rollout of customized special versions tailored for technical fabrics, as well as dedicated devices for each application, make the R9500 by Itema the perfect machine for the manufacture of the full range of technical textiles, including ones with the finest monofilament yarn, multifilament yarn with high tenacity, and multiple pick insertion fabrics. Considering the prevalence of technical fabrics production in China and in Asian Countries, the R9500 540cm weaving a coating fabric style will definitely represent an attention point in the weaving hall.

On the airjet side, ITMA Asia will be the stage for two Itema airjet machines, the A9500 weaving an apparel fabric and the A9500p weaving a bottom weight fabric.



Derick Melander, clothing sculptures

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A WORLD PREMIERE BY PICANOL: NEW RAPIER GTMAX-I 3.0

Picanol's newest rapier, the GTMax-i 3.0, will be shown for the first time to the textile world. The GTMax-i 3.0 is building further on the success of GT-Max and GTMax-i.

The combination of a redesigned gripper drive and extra reinforced sley drive as well as the integration of the future-oriented BlueBox electronic platform allow for even higher production speeds. Moreover, the look of the machine has been reworked completely, with a special focus on ergonomy and user friendliness.

In total 4 machines of this type will be on display at the show. On the Picanol booth, a GTMax-i 3.0 will be weaving a denim fabric, another one will be weaving a zebra style curtain fabric. On the Bonas booth a decoration fabric is running on a GTMax-i 3.0 with jacquard, whereas on the Tongxiang booth a GTMax-i 3.0 will be weaving label. Next to the all new GTMax-i 3.0, four more machines will be present, completing the Picanol weaving machine range on display.

On the Picanol booth two OptiMax-i 190 cm weaving para-aramide and shirting are being presented. As for the airjet machines, two OMNIplus Summum will be shown, one weaving a bottomweight fabric and the other weaving sheeting. On the Stäubli booth a TERRYplus Summum with jacquard is weaving a high quality terry fabric.



Picanol GTMax-i 3.0 © Picanol

So in total 9 Picanol machines will be on display, of which six on its own booth. One Picanol TERRYplus Summum with jacquard will be on display at the Stäubli booth and one GTMax-i 3.0 on the Bonas booth. On the booth of Tongxiang a GT-Max-i 3.0 will be weaving label.

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VANDEWIELE COMPANIES WILL PRESENT NEVER SEEN INNOVATIONS

VANDEWIELE (BELGIUM) will exhibit together with its member companies BONAS, COBBLE and SUPERBA.

VANDEWIELE is proud to present as a world's first the 3 meter execution of the Velvet Smart Innovator VSi for plain and jacquard velvets. The main specs of the machine include parallel reed motion, reinforced cross members, single beams over the full width and up to 24 servo driven smart frames. The VSi "345"-type is now available for plain velvets as well as jacquard velvets including light viscose carpets and prayer rugs.



VSi22 Velvet Smart Innovator for weaving plain velvet on 3 meters width @ 2018 VANDEWIELE

The new showpiece in carpet weaving is the "HCiX2" in reed 1500 dents per meter, 8 colour frames (1500/8). This high density carpet weaving machine, available in 3 and 4 meters width, is able to weave carpets with up to 5 million points per square meter, creat-ing niche high end products, with a handmade look. The same machine is able to weave carpets in reed 750 dents per meter, using 16 colour frames. More colours or effects can be created using a filling selector.

The HCiX2 is perfectly suited for pic-ture weaving: instead of the traditional labor-intensive designing of woven carpet, a photo-realistic picture is pro-cessed in real time and converted to a design that fits the weaving machine. The HCiX2 is also available in the common configurations 1200/8, 1000/10, 1000/8...

BONAS will present the Si27 on an Itema R9500-340 cm with 27.200 in-stalled hooks, weaving wall covering & bed covers. The Si range, known as trailblazer in jacquard weaving thanks to its most compact design, light-weight, low energy consumption and high efficiency is now available from 2.688 up to 31.104 hooks, the largest single jacquard machine available on the market. The performance and stability of the Si is demonstrated while weaving OPW airbags at high speed, with 11520 hooks, on a Dornier Air Jet. The double-sided drive mechanism proves its usefulness. Bonas' other successful Jacquard range, the Ji, is of course displayed as well.

Furthemore, a Ji5 equipped with 5.000 hooks will weave furnishing fabrics on a Picanol GT Max-340 cm. A Ji2 with 2688 hooks will produce terry towels on a Rifa Air Jet. Another 6 Ji's will be on display at the exhibition weaving from label over terry to furnishing fabrics.

A key development of Cobble is the Individual Pile Delivery (IPD) for the Colortec tufting machine, giving a more even pile surface of the tufted carpet, resulting in less yarn consumption.

The Colortec, in combination with the in-house developed software TuftLink, is able to produce carpet with multiple density and color gradients. Also, it is perfectly suitable for the production of imitation hand-tuft qualities up to 4.2 kg/m², even with combinations of dif-ferent yarns.

On the Myriad tufting machine, designs of 240 m² without repeat are possible for wall-to-wall side matching. The Myriad is available up to 1/12" gauge and can be equipped with double sliding needlebar. All Cobble tufting machines are available up to 5 meters width. Fabric samples of all these machines will be presented.



High capacity Si jacquard with 31.104 hooks @ 2018 VANDEWIELE

SUPERBA S.A.S (France) is the world leader in space dyeing and heat setting machinery for carpet yarn (PP, PES, PAN, WOOL & blends).Present on the Chinese market since 1992, SUPERBA is having a subsidiary in Shanghai (SSRO). The Chinese carpet market is currently focused on the use of polyester and polyamide fibers to manufacture rugs; one of the current favorites is the tufted printed carpet for domestic market. This kind of carpet requires a well-defined pin-point effect to get a pre-cise printed drawing.

SUPERBA TVP3 heat-setting line offers the highest pin-point definition with their saturated steam process. The recent improvements in SUPERBA's space-dyeing technology, like bicolor printing, or dyeing polyester yarn, are likely to arise great interest among the Chinese manufacturers.

GROZ-BECKERT WITH NEW INSIGHTS IN GLASS

Groz-Beckert will be present with all six product areas and their latest innovations.

The Groz-Beckert WeChat Account went online in 2017. Since then, the needle manufacturer has been providing weekly news on the company, its products and services. The content is published in Chinese. Visitors will have the opportunity to find out more about the WeChat Account.

The Knitting (knitting and warp knitting) product area will be presenting its portfolio for circular knitting, flat knitting, leg wear and warp knitting. The division will be placing a particular focus on a system-oriented approach: Thanks to extremely tight production tolerances, needles and system parts from a single source guarantee precisely coordinated tools for smooth interaction.

This year, a new acrylic exhibit of a sock machine rounds off the glass insights into the different knitting technologies. The exhibit demonstrates a wide range of Groz-Beckert products in different gauges – with needles and system parts for ten different models from the fields of socks and seamless hosiery. Whether cleaning, drawing-in, tying or weaving: As a system provider, Groz-Beckert offers a unique product variety with its Weaving division.

The high-performance tying machine KnotMaster will be presented in the field of weaving preparation. It is characterized by a wide variety of functions, ranging from single and double knots and short knot ends, through to four knotting types and thread breakage monitoring.



Groz-Beckert Weaving KnotMaster © 2018 Groz-Beckert

Heald frames and healds, as well as warp stop motions, drop wires and the Posi-Leno® leno system will be available for customers to experience in action in the WeavingLoom, a replica weaving machine made from acrylic glass. Four fabric strips will highlight the different applications, from leno to jacquard fabric. As a development partner, Groz-Beckert has expanded its range for application advice with is own staple fiber needle punch line in the field of Felting (nonwovens) in the Textile and Development Center (TDC). The system is available to customers and partners for tests and joint projects. A 3D-printed model in 1:18 scale will impress with its wealth of detail.

The division will also be presenting its patented GEBECON® Felting Needle, which offers improved surface quality and optimal bending resistance. The EcoStar® Felting Needle is characterized by its special working part cross-section, which has been reduced by 13 percent compared with the standard needle.

For spun lace customers, Groz-Beckert will be presenting the innovative HyTec® jet strip. The significantly higher hardness and the spring-hard properties have a positive impact on all mechanical properties. As a system provider, Groz-Beckert also offers all tool components – consisting of tufting needles, loopers, reed fingers and tufting knives, in the field of Tufting. The Gauge Part System impresses with its controlled and coordinated selection of materials and adherence to the narrowest tolerances. The Groz-Beckert gauge part system fulfills all requirements of rug and



Groz-Beckert insights in glass © 2018 Groz-Beckert

artificial lawn manufacturers for functionality, reliability and durability, delivering a remarkable cost-saving result.

A perfectly coordinated interplay between the clothings in the field of Carding achieves an optimal carding result both in the revolving flat card and in the roller card. SiroLock® and EvoStep® lead to better fiber control and a more even web.

For the spinning industry, Groz-Beckert offers metallic card clothings, flat top and stationary flat clothings, as well as flexible strips. For processing synthetic fibers in particular, the company offers a special card clothing with a curved tooth profile: the synthetic doffer wire D40-30-52C CBF. This achieves a better fiber transfer from the cylinder to the doffer, thus creating an improved yarn quality and higher efficiency of the revolving flat card. The Sewing product area will be showing how the different stitch formation types work in detail.





DIGITALISATION AND SUSTAINABILITY TOP THEMES OF KARL MAYER'S PRESENTATION

"The mega trends of digitalisation and sustainability are changing the world as we know it. As an innovative global market leader, we see these changes as an opportunity for our customers. We will be showing our visitors how KARL MA-YER is implementing these strategic themes, digitalisation and sustainability by delivering integrated solutions offering a wide range of advantages," says KARL MAYER's Managing Director, Arno Gärtner.

DEVELOPMENT OF THE BEST DIGITAL SOLUTIONS

As a pioneer in textile machinery building, KARL MAYER is following a broad digitisation strategy. An important element of this strategy is to support its customers with new digital solutions at a market leader level. At the fair a new umbrella brand will be launched, offering innovative digital solutions known as the KARL MAYER Digital Factory, which was introduced last year. The initiatives for this strategy are being coordinated by Antonia Gottschalk, the Head of Digitisation. The expertise for doing this is based on an efficient network. Since March 2018, KARL MAYER has been part of ADAMOS, an alliance made up of industrial and software companies. At the end of 2017, KARL MAYER also set up its own start-up company in Frankfurt, known as the Digital Factory, for developing new, innovative digital business models, products and services. In future, these will be combined under a new umbrella brand, which is being launched.

For the first time, KARL MAYER will present its own solution for networking its machines. This digital solution will provide its customers with transparency in real time regarding the performance of their machines, and can be used in the company's own network with very little modification.

INTEGRATED SUSTAINABILITY

What KARL MAYER is doing to promote sustainability will be on show at the fair and on the internet at www.CLEANER. PRODUCTIONS. The environmental aspects of this include the LEO® Low Energy Option, which should enable energy consumption during machine operation to be reduced by between 9.5 and 13 %, depending on the type of machine. Costs and CO2 emissions should be reduced at the same time. With its PRO-SIZE® sizing machine, KARL MAYER is offering weaving companies involved in the production of terry goods a sizing machine based on the concept of sustainability. With this machine, the sizing agent is applied by a highly efficient, intelligent process. Compared to conventional methods, this reduces the consumption of sizing agents by up to 10% and reduces bath volumes.



PROSIZE® © KARL MAYER

THE LATEST GENERATION OF MACHINES

For the first time, the widest high-speed tricot machine in the world, the HKS 3-M, 280", will be demonstrated to the public in operation at the exhibition. This new machine delivers maximum flexibility for the usual product repertoire. Unlike previously, articles of different widths and also more fabric webs can be produced simultaneously on just one machine. The unique performance of this machine will be demonstrated as it produces a velour fabric in a gauge of E 32.

Other highlights include a fashion show showcasing decorative, trendsetting fabrics, and a presentation of the Technical Textiles centre of excellence.

An in-house show at KARL MAYER (CHI-NA) in Changzhzou will also be held at the same time as the fair, scheduled for 15 to 18 October. Here, the TERRY.ECO concept for the environmentally friendly production of terry goods, the core element of which is the TM 4 TS-EL machine, will be shown. In Addition, the new COP 5 M-EL, 180" five-bar tricot machine will be unveiled to the public for the first time. This machine will be producing a shoe fabric. The electronic guide bar control facility and five guide bars make the machine extremely flexible.





STOLL WANTS TO SURPRISE VISITORS

For STOLL the ITMA Asia + CITME will be the showcase for innovations. Visitors can look forward to many interesting surprises. Customer orientation will once again play a central role.

For the first time, the new ADF 830-24 W knit & wear gauge E7.2 will be presented in the area of knitting machine technology. This machine is the answer to the most complex technical requirements for large knits, oversized knits, and unusual cuts in the knit & wear range. At the exhibition, a knit & wear sweater with plating technology will be presented.



CMS 330 HP W TT (c) 2018 STOLL

These other machines will be exhibited: CMS 330 HP BW TT sport, CMS 502HP + Bc and the ADF 530-24.

KNITELLIGENCE® - STOLL'S NEW SOFTWARE SOLUTION

One of the highlights of the steadily growing STOLL Software Solutions division is the presentation of the new software solution knitelligence®.

STOLL's knitelligence® is a modular system that combines all of STOLL's software solutions under one platform that covers the entire value chain of flat-knit production. From design to production, it can be easily integrated into existing customer processes. There will be live demonstrations for the visitors.



ADF 830-24 W (c) 2018 STOLL

On behalf of the presentation of an idealy specified CMS 330 HP W TT sport multi gauge E7.2 for the making of knit to use shoe uppers, STOLL would like to show the performance range of a STOLL machine for technical applications.

MAYER & CIE. PRESENTS NEW HIGH-END ELECTRONIC JACQUARD MACHINE

Mayer & Cie. (MCT) is focussing entirely on electronic machines. All three machines scheduled to be on show in Shanghai – the Spinit 3.0 E, the OVJA1.6 EE 3/2 WT and the OVJA 2.4 EC – come in this category.

It will be the first time the Spinit spinning and knitting machine and the OVJA1.6 EE 3/2 WT, designed especially for knitting shoe uppers, have been exhibited in China. And it will be the first time ever that the OVJA 2.4 EC has been on show. It is an electronic jacquard machine that Mayer & Cie. China (MCN) has added to its product line. With its 2.4 systems per inch it is a full jacquard machine that outperforms Chinese manufacturers' conventional models in productivity. Thanks to its three-way-technology, the OVJA 2.4 EC offers great variety in design patterns.



The OVJA1.6 EE 3/2 WT specialises in manufacturing shoe upper fabrics. © 2018 Mayer&Cie

It is aimed at discerning Chinese customers who produce fabrics for outer garments, sports- and leisurewear.

Its design is borrowed from that of the successful OVJA 2.4 SE mini-jacquard machine and its functionality is based on that of the OVJA 2.4 E full jacquard machine. The most important difference between it and the two machines on which it is modelled is the implementation of the needle selection. The OVJA 2.4 E relies on electronic individual needle selection on one track via control board and the Chinese model uses 16 athermal electromagnetic actuators on eight tracks.

SPINIT 3.0 E: MAKING THE POTENTIAL OF SPINNING AND KNITTING TANGIBLE

"We are delighted to be able to present our Spinit 3.0 E spinning and knitting machine 'in the flesh' at this year's ITMA Asia," says Michael A. Tuschak, Mayer & Cie.'s spinitsystems marketing and sales manager. Tuschak anticipates visitors with a strong interest in the spinning and knitting technology. Experience, he says, has shown that the technology is mainly of relevance in established textile markets.



AHEAD OF PROGRESS WITH MONFORTS

The potential of Industry 4.0, in combination with the drive to reduce waste and minimise raw materials usage, has led to some significant new developments by Monforts.

At this year's ITMA Asia + CITME, visitors can learn about the company's latest Qualitex 800 control system, which along with the Web-UI app, allows the remote visualisation of Monforts technologies via smart phones and tablet devices.

"We are already embracing many Industry 4.0 principles in our approach to new machine concepts and the Qualitex 800 has all the intuitive features operators will be familiar with from touchscreen devices," explains Monforts Vice-President of Sales and Marketing Klaus Heinrichs. "It is making navigation extremely easy for operators, cutting down the time required for becoming familiar with a new system and allowing complete control of all machine parameters." Resource efficiency is being addressed via the latest technologies such as the company's Eco Line for denim, based on two key technology advances – the Eco Applicator for minimum application of the selected finishing chemicals and the ThermoStretch.

As an alternative to conventional padding, especially for wet-in-wet solutions, the Monforts Eco Applicator can significantly reduce the amount of finishing chemicals required prior to the stretching and skewing of the denim fabric.

In many textile mills globally, the cost of energy for running integrated manufacturing lines – especially those for fabric finishing that can involve numerous sequences of heating and subsequent drying – is now eclipsing the cost of paying people to operate them.

The ability of the Eco Applicator to significantly reduce energy costs has seen it rapidly accepted on the market. The Monforts ThermoStretch unit meanwhile carries out the skewing (weft straightening), stretching and drying in a continuous process.



Denim finishing range at customer BERTO in Italy © Monforts



Advanced technical textile web finished on the Monforts TT-Range © Monforts

"The Eco Line system reduces energy requirements and losses, increases thermal transfer and keeps the drying ener-

Web-UI provide machinery data visualization for

gy on the textile material longer," says Monforts Area Sales Director and Head of Product Management for Denim Hans Wroblowski. " As a result energy savings of up to 50% are being achieved.

Monforts is also the only manufacturer which is able to offer completely integrated coating lines from a single source and at ITMA Asia + CITME 2018, the company's specialists will be on hand to explain how its latest coating heads are being tailored to drying technology for maximum benefits.

For an unprecedented range of options, Monforts now offers multi-functional coating heads for both its industrial texCoat and Allround coating units. Module options include those for screen printing, magnetic coating and knife coating, either integrated into new lines or retrofitted into existing installations.

"Our system has the shortest fabric path from the coating unit into the stenter and all of these options are available in wider widths," says the company's Head of Technical Textiles, Jürgen Hanel.

"PASSION FOR INNOVATION"

Thies concentrates on sustainable product solutions and focuses on the development of innovative, intelligent and integrated concepts for yarn and fabric dyeing. This time Thies Textilmaschinen will present the established and successful iCone yarn dyeing machine.

This machine consolidates highest ecological standards with technological intelligence to achieve tremendous savings in water and electrical consumption.



Thies iCone © Thies

The 2018 version incorporates various new detail improvements, many of them developed in response to suggestions from customers and users.

The construction of the iCone is based upon the worldwide established eco-bloc series of Thies, but involves innovative new technologies. Its newly designed 'pump bloc' system allows dyeing with an ultra-short liquor ration.

Depending on the carry-over of the material, liquor rations of 1:3,6 in partially flooded vessels are performable in practice.

Improved rinsing functions allow the reduction of the after-treatment times. Moreover, the new flow converter design enables the adjustment of the flow reversal, namely from inside to outside and from outside to inside.

XETMA VOLLENWEIDER PRESENTS NEW LACE CLIPPING SYSTEM

Following the successful introduction of the first warp float cutting machine for jacquard woven fabrics, Xetma Vollenweider release now the new lace clipping machine X-CITE XF.



X-CITE XF © 2018 Xetma Vollenweider

With the next generation of the X-CITE XF technology Xetma Vollenweider is providing a new model range for clipping warp knit lace and cutting floating warp threads of jacquard fabrics. The key advantage of the X-CITE XF as compared with conventional clipping machines is the option to realize a reliable clipping not only of straight warp floats, but of diagonal oriented floating threads, too. Concerning a wide range of technologies in the field of textile finishing for apparel, home textiles and technical textiles, Xetma Vollenweider opens up a further market with the new X-CITE XF.

Potential customers for the Clipping machine X-CITE XF are manufactures of Raschel lace and "Calais lace", as well as commission finishers in this segment. Xetma Vollenweider is a company with long-standing traditions in developing and manufacturing textile finishing systems with over 165 years of experience.

The innovative technology portfolio of Xetma Vollenweider includes the following product lines:

- Soft Touch Brushing & Emerizing
- Plush Touch Raising
- Even Touch Shearing
- Level Touch Carpet Shearing & Finishing
- Clean Touch Fabric Cleaning

The complete product range of Xetma Vollenweider is developed by experienced engineers and completely produced at the company domicile in Aue, Germany. This enables Xetma to provide individual solutions for textile companies, always customized for their specific needs.

INTELLIGENT MANUFACTURING SOLUTIONS FROM SEDO TREEPOINT SUPPORTING **DIGITALIZATION**

Sedo Treepoint's technology is the core for digitalization, not only for the textile dyeing and finishing, but also for other departments like spinning, weaving and knitting.

An integrated system can be build up that does not stop at production management but also includes color management. The build in intelligence of the production planning, simulation and color management can save high amount and will increase sustainability remarkably. Energy-Managment by EnergyMaster will give you the tools to dig deeper into Energy Consumption and to set higher goals for savings. Processes can be shortened and daily batch production increased significantly.

Where is this order in production now? Sometimes this question is not so easy to answer. Included routing functions will tell you at a push of a button on which machine the fabric is in process and will support determining capacity requirement and schedule production activities.

Beyond the integration of the dyeing department, it is also important not to stop here. Continuous processes are next to be integrated in an overall company system. Having valuable machine data, business intelligence for manufacturing is giving customers important key data for a shift leader, operation manager, technician, management or machine operators. No need to rely on unproved statements like: "Machines type B the most sustainable type". Production related reports show the reality: Water consumption per kg fabric or yarn, power consumption for a kg of dyed knitted fabric, etc.





Precise control technology for high qualities.







MARKET LEADER DILO PRESENTS **RECENT DEVELOPMENTS**

Asia is one of the most important markets for needled nonwovens. For this reason Dilo, leading supplier for needlefelt production lines, will present its products and developments.

DiloGroup consists of DiloSpinnbau, DiloTemafa, DiloMachines and DiloSystems and offers machinery for complete production processes. The quality of DiloGroup's four equipment components, opening and blending, carding, crosslapping and needling, is important to customers. A DILO line stands for highest productivity with best web quality. This goes hand in hand with a high efficiency as the mentioned four machine groups are controlled by a single drive and control technique and fulfill all requirements for modern crosslinking and smart production.

Individual lines are engineered, manufactured, delivered and put into operation by DiloGroup for the customer's specific purpose and benefit. Service and spare parts supply to support the high availability of DILO nonwoven production lines is available worldwide. In its 116 years of history, the company has always set new standards in regard to machine performance and efficiency. Innovative technologies like DI-LOUR, DI-LOOP and Hyperpunch have created new markets for the nonwovens industry and have contributed to continuous growth.

In addition to information about standard universal lines, DILO will inform about the latest developments in DILO machines which aim to increase efficiency, productivity and improve end product quality by the degree of automation.

Examples of recent developments in the machinery are the Hyperlayer, Feeder VRS-P and the DILO Compact Line.

The HyperLayer was designed on the principle of the camelback crosslapper and completely revised. The kinematic solution of this crosslapper transports and lays down the web very precisely and is especially suited for very light webs, layering only few layers. It realizes highest production speeds (web infeed speed up to 200 m/min) at a precise laydown with a minimum of draft.

The new card feeder VRS-P combines the principles of a volumetric, precisely charged feeding with the characteristics of a vibration chute feeder and saves a conventional large trunk. This results in a better and more homogeneous distribution of the flocks and the ceiling height of the building is no more a limiting factor.

A vacuumed delivery apron condenses and homogenizes the fibre flock matt. Additional control flaps homogenize the fibre distribution over the working width. On the whole this results in a significantly better flock matt and consequently in a better felt quality.

The Dilo Compact Line (DCL) was first presented 2015 and has since then been successfully used in industry and research. It meets the requirement for the production of small amounts of high quality felts made from special fibres like carbon fibre, ceramic or Teflon. Very interesting topics like the recycling of carbon fibres are already researched on these lines in various projects. With a working width of the compact carding machine of 1.1 m and a layering width of 2.2 m, only 60 m² of space is required for the installation. Dilo looks forward to meeting you in person at ITMA Asia + CITME 2018I to discuss the latest developments and technologies in detail.



DILO Compact line © 2018 DILO

ANDRITZ PRESENTS ITS CUTTING-EDGE SOLUTIONS

In response to market demands, ANDRITZ has yet again raised the bar for turnkey and customized solutions for drylaid, spunjet, thermobonding, and wetlaid, as well as for conversion of absorbent hygiene products.

A NEW SOLUTION FOR THE HYGIENE MARKET

Air-through bonding lines are the preferred choice for producing nonwovens with the best quality of softness and bulk for acquisition and distribution layers, top sheets, and back-sheet products. With ANDRITZ carding machines and the new flat belt oven, customers benefit from high production capacities and high-performance fabrics from 16 to 80 gsm, produced with bicomponent fibers. Several Chinese customers have already invested in ANDRITZ aXcess carding machines. In addition, the CETI, has recently installed an air-through bonding oven.

FULL DRYLAID PROCESESSES OFFER

Thanks to its aXcess portfolio, ANDRITZ offers the full range of drylaid processes for medium production capacities. During the past few months, Chinese spunlace producers have invested in several aXcess lines with direct-line and crosslapped configurations manufactured by ANDRITZ Wuxi. In the medium-capacity needlepunch area, ANDRITZ signed a cooperation agreement in 2017 with ShanTou SanFai Nonwoven Machinery, a leading supplier of needlelooms in China.

NEW DEVELOPMENT IN TEXTILE CALENDERING

With the latest development in textile calendering, ANDRITZ in co-operation with Rolf Ramisch, who has over 45 years of experience in this specific business, is again raising the bar for the textile calender market. The new teXcal raconip calender is versatile, operator friendly, and provides IIoT features for a smart production process.



ANDRITZ air-through bonding line at the CETI (European Center for Innovative Textiles) facilities in Lille, France \circledast 2018 ANDRITZ

ENGINEERING FOR NONWOVENS

Lines for Needled Nonwovens



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DiloGroup

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46 textile.4U

HIGH SPEED BOOST

In the past months, Autefa Solutions has again sold several card- crosslapper combinations into the Chinese market, which will boost the speed and production in existing and new spunlace lines. The main challenge in such high speed lines is to keep fibers at any time and process stage under control. Autefa Solutions Injection card enables (Drylaid) web forming at very high production. The fibers are taken off the worker rollers by an aerodynamic effect generated by specifically shaped devices, that are replacing the traditional strippers. This avoids considerable mechanical stress on the fibers which results in less fiber shortening and nep formation. The Injection Card delivers a quality web at the highest productions with a better MD/CD.



Autefa Solutions Nonwovens competence center, Linz Austria © 2018 Autefa Solutions

The Injection Card uses a unique combination of mechanical and aerodynamic principle for a gentle fiber treatment. This carding concept joins some benefits of the cotton card with the advantages of traditional cards with workers and strippers. On the main cylinder, the traditional mechanical principle using workers and strippers has been replaced by an aerody-namic principle. With the Topliner CL4006 SL Autefa Solutions offers a crosslapper with special features for the Spunlace application. Highest layering speeds and precise weight distribution are possible thanks to the integrated draf-

ting unit, compensation belt, antistatic equipment and new designed transport aprons. These features are very important especially for lightweight applications in spunlace lines and ensures the infeed speed up to 130 m/min.Autefa Solutions high speed webforming sub-system, consisting of Injection card and Crosslapper CL4006 SL supports customers to keep or extend their leadership in the highly competitive Spunlace market.

TMAS MEMBERS SHOWCASE INNOVATIONS IN SWEDISH MACHINERY

TMAS, the Textile Machine Association of Sweden, has nine members, each at the forefront of their own specific segment, and with a long and successful history and a passion for textile manufacturing.

"We know and understand the Chinese market, and we realize the trends for the future that will shape the Chinese textile and garment industry. We work in close collaboration with our customers and understand the market drivers. This enables us to constantly drive innovative breakthroughs in order for our customers to stay competitive," said Mikael Äremann President, TMAS. Swedish machinery producers will be proudly represented by four TMAS members.

IRO (H3 C01) will be displaying their wide range of yarn feeding equipment, that are optimized to meet the demands of advanced modern weaving machinery. The feeders incorporate innovative energy efficient permanent magnet motor design and incorporate developments such as easy "plug and play" for connecting intelligent accessories and an improved threading-up system. **Eltex** (H3 C10) will have their new Eltex EyETM Yarn Tension Monitoring System on display. The system moni-tors the yarn tension on all positions in real-time and you are able to immediately detect any fault position. Eltex EyETM greatly helps increase the quality of warp beams. The result is fewer problems, not only when warping, but also in the next step when weaving or tufting. The system is suitable for applications such as warping, winding, etc.

Eton Systems (HS B14) will show their unique concept for material handling, developed to create efficiency, increase production and full traceability. The machines incorporate a real-time information system and the necessary tools to improve the manufacturing processes through powerful software programs. .

ES Automatex (H5 D04) deliver high performance automated systems with high reliability, designed to meet specific customer requests. Are you looking for intelligent, automated sewing units for home textile, bags or garments then make sure you visit ES Automatex.

ASSOCIATIONS

ASSOCIATIONS

FRENCH TECHNOLOGY

French textile machinery manufacturers are the sixth textile machinery exporters worldwide with state of the art, world leaders in such fields as long fibre spinning (wool, acrylic ...), yarn twisting and control (including technical yarns), space-dyeing, heat setting for carpet yarns, carpet systems, dyeing and finishing, felts and belts for finishing processes, nonwovens, air conditioning of textile plants and recycling processes of textile materials.

Evelyne CHOLET, their association Secretary General states: "when I travel across China I am always astonished by the speed of the changes. For examples, transportation is now so easy, pollution is much less than it was, Chinese men and women are looking for high quality and fashion whether in apparel or home textile.

These trends together with the rise of the salaries make it a must for the textile industrialists to invest in the best machines. These machines have to be productive, efficient, reliable, energy and environment friendly. The machines our members will introduce in Shanghai have all of these characteristics; moreover, the services our members offer in China with their own subsidiaries, service centers and with their local representatives are really at the top."

Here are some of the French exhibitors:



N.SCHLUMBERGER head of the new model GC40 chain gill drawing machine.© 2018 NSC FIBRE TO YARN

© 2018 AIRLAY FLEXILOFT . © LAROCHE

NSC FIBRE TO YARN Hall 1 Booth D35 NSC FIBRE TO YARN which includes N. SCHLUMBERGER and SEYDEL will exhibit one drawing head of the new model GC40 chain gill drawing machine well-known for producing of high quality yarn in long staple fibres for combing, recombing, spinning preparation and tow to top in polyester and acrylic.NSC will focus on its latest technological advances made to its product range: a new GC40 family drawing machines, the GN8 intersecting drawing machine, the evolution of its ERA comber will be particularly unveiled to the Chinese and international customers. **LAROCHE** Hall 2 Booth A34 LAROCHE has been a major player in the textile waste recycling and airlaid nonwoven field and is now deeply involved in new technologies for turning post-consumer goods into valuable products.

Some recent examples: Special lines now can open used clothing back into fibers whilst removing the metal and plastic contaminants. The fibers can then be airlaid and thermobonded into felts for the automotive, bedding and furniture industries. Old mattresses can be deconstructed and the foam can be shredded into chips, the textile portion can be opened back into fibers and both can be airlaid and thermobonded back into components for new mattresses.

FIL CONTROL Hall 1 Booth D06

For more than 35 years, FIL CONTROL has been developing and producing electronic devices. FIL CONTROL recommends a newly tension sensor MYT-T. MYT-T, a load cell sensor devoted to assembling, winding and texturing operations: high count (400 to 10,000 DTex) and high tensioned yarn (up to 4,000g). The sensor delivers an analog signal proportional to yarn tension. This information will be used by machine controller to keep yarn tension constant or stop the spindle if tension is out of normal operation range. **AESA Air Engineering** Hall 1 Booth D14 AESA is a worldwide leader in air engineering and supplies air conditioning and waste collection systems.

Targeting a higher energy and environmental efficiency customers are using AESA know-how and experience in design and implementation of air conditioning plants. Also the well-known WEAVE DIRECT systems offer reductions in power consumption combined with an accurate process condition on the weaving looms thanks to a dedicated supply air ducting system with diffusers above each loom. The user-friendly DIGIVENT control and monitoring system is communicating in interactive screen functions and is allowing a wide usage of recorded data.

DOLLFUS & MULLER Hall 6 Booth D16 DOLLFUS & MULLER is a leading manufacturer of endless felts and dryer belts for the textile finishing and nonwovens factories. They have particularly improved the compacting felts for knit finishing with major evolutions. Their quality brings a special care to the fabrics thanks to its smoothest surface, they have an excellent guiding and the best compacting rate in relations with its new exclusive compacting felt design. The sanforizing palmer felts are ideal for denim producers.



ASSOCIATIONS

MARKET LEADERS FROM

SICAM will demonstrate a deep experience in the thermobondjng process, where the temperature and the air flow distribution are critical parameters. In addition, SICAM has a big experience to handle in the machinery very light webs (I.e. 8 gsm) at very high speed in spunbond lines, more than 1.000 m/min.

SALMOIRAGHI AUTOMATIC HAND-LING GROUP, internationally reputed market leader in automated handling and storage systems for man-made yarn bobbins and other textile products, will exhibit the "IGVD Automatic Doffing System". This is a driverless, automatically guided, battery-powered vehicle equipped with a special doffing module with twin bobbin mandrels. The vehicle features a state-of-the-art inertial guidance system, ensuring millimeter positioning accuracy. This machine is designed to perform the same tasks as the "classic" Salmoiraghi Automatic Doffers. The IGVD Automatic Doffing System is specifically designed to serve both the latest generation double-chuck winders for man-made continuous yarn, as well as classic single chuck winder types.

CORMATEX (H1/E02 Woollen Spinning & H2 / A28 Nonwoven) in particular, would like to draw the attention on the Horizontal Airlay system "Lap Formair H", because of its capability of processing a variety of different fibres, even in heterogeneous blends (such as short fibres – less than 5 mm - or fragile fibers as well as not fibrous materials like PU foam waste or wood scraps), by mixing them also with powder resin in alternative to conventional low melting fibers. This kind of technology combines high ecological value (waste recycling) with huge economic advantages (low investment and maintenance costs, high productivity, extreme product versatility). Ap-plications are building construction, automotive industry, furniture, mattress production, agriculture, packaging, apparel and so on.



Salmoiraghi IGVD Automatic Doffing System © 2018 Salmoiraghi

NOSEDA (Hall H6, Stand C25) will present innovative and environmental-friendly products, as well as its new technologies that are constantly evolving. Noseda offers a wide and complete range of dyeing machines for yarns (TF series), for fabrics in rope with the long jet MF and SP, without reel model. With reference to open width fabrics, they propose the beam dyeing TS-A1 and, what is more, the washing range ELTEX W25-35 with its unique characteristics. Noseda's focus will be on the beam dyeing machine model TSA1. The beam dyeing in concept versions allows a higher load, or, in case of machine full load, higher flow rates and, therefore a higher evenness and fastness as well as lower process dyeing time.

PENTEK (Italian Pavilion Hall 6 / Booth C34) is pleased to introduce the latest version of DreamAir, the exclusive wet tumbler for specialty finishing effects. Thanks to the refined airflow fabric transporta-tion with mechanical action, DreamAir is a unique creative tool dedicated to the most demanding fabric finisher. From chemical processes to various washing effects, it's now possible to reproduce in continuous an entire range of wet applications which are conventionally achieved in discontinuous batch machines.

TOMSIC (Hall H1 / Booth E14), one of the leading companies active in complete laboratory equipment for spinning mills as well as autoleveller system for cards and drawframes, will highlight its Evenness Tester named EASY: the even-ness tester for yarn, roving and sliver.

The consistently great success of the TOMSIC tester is thanks to application of the most advanced technology, simplicity of operation, flexibility, zero maintenance cost and an attractive price to performance ratio. "EASY" is equipped with a very operator-friendly software. All operating parameters are setting in only one window. In the same window the measuring units also can be selected before test run. The flexible software, installed on a normal PC with Windows 10 platform, allows automatic update of the latest features directly from the head Tomsic service station.



textile.4U



THE ATC IS FOR EVERYONE!

The road is sometimes a long one for the development of a textile product from the first idea through to series production and there are a great many stages involved. This for particular applies in the sector of textile finishing, because many individual production processes influence the feasibility and cost-effectiveness of a product.

In order to make the development of a new product faster, cheaper and, above all, absolute reliable, the company A. Monforts Textilmaschinen from Mönchengladbach (Germany) offers its customers the services of a state-of-the-art technology center for almost the entire range of textile finishing. The Monforts Adavanced Technolgy Center (ATC), launched in 2013, has set new standards in this field.

It allows customers in-house opportunities to undertake trials on Monforts machines under fully confidential, real production conditions. Occupying a 1500m2 area, the €2.5 million investment is located in a complete hall at the company's headquarters in Blumenberger Strasse, Mönchengladbach. During the summer we had the opportunity to visit the new ATC and talked with Vice-President Klaus Heinrichs about the possibilities of use and the customer interest.

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onforts names the ATC a hi tech, world class facility and emphasize it is another example of Monforts policy to fully support its customers in achieving the best possible solutions in finishing its fabrics efficiently under ecological and economical conditions. "With the ATC, Monforts has taken a big step forward," Mr. Heinrichs told us. "We are very happy we have it and our customers are the same - there is hardly a day when we have no customer visits here and we also use it for internal testing, presentations and training."

Right from the start, the ATC hall included a full Thermex continuous dyeing range suitable for the Econtrol process; a Montex 6500 stenter for knitted fabrics with vertical chain return and equipped with Eco Applicator; and a Montex 8000 stenter for technical textiles - incorporating Eco Applicator, high temperature and an explosion-proof execution for treating fabrics with solvents. In addition, the modern building is fitted with a meeting room and an interactive showroom. Other facilities include a steam generator and complete utilities including a colour kitchen and fabric laboratory testing equipment. In September 2016 the textile machinery manufacturer once again expanded the possibilities of the ATC and added a new complete coating line. This expansion allows customer's in-house opportunities to undertake trials with Monforts complete range of coating heads under fully confidential, real production conditions.

oday, the ATC includes comprehensive test facilities; where dyeing and finishing trials can be performed with the customers own woven, knitted or non-woven fabrics or technical textiles, under full working conditions. Furthermore, the facility offers trials for a complete range of options for coating applications including knife over air, knife over roller, magnetic roller and printing head coating options such as, for example, magnetic roller coating for lacquering or minimal application. Fully enclosed, the coating line is set up for solvent flammable materials. Test can also be undertaken for PTFE at temperatures of up to 310° C and PTFE sintering. The line caters for coating applications up to 1.8 m width, printing up to 1.6 m and magnetic systems up to 2m.

"Here at ATC we have the most advanced machines available and of course both our technicians and our customers enjoy working at the forefront of technology", said Mr. Heinrichs.

Monforts offers a comprehensive customer's advice by their technologists on all aspects of coating, dyeing and finishing for classical and technical textiles providing full assistance for economic and ecologic processes. Using the results from the trials, Monforts will also be able to make recommendations for improving fabric finishes. Training courses are also available for machine operators to run the machines under minimum use of dyestuff and energy input for best value added finishing results.

"With this all-embracing range of latest machines, we are offering customers and potential customers the possibility of carrying out extensive fabric trials under real production conditions. That makes the ATC very valuable and we actually provide these values to all textile companies. Any company that wants to use our ATC to improve its own production or to test new products or improve existing ones is welcome", concluded Mr. Heinrichs.



Coating line for Technical Textiles (right) and stenter for knitted fabrics © 2018 TexData International



Coating line for Technical Textiles © 2018 TexData International



Manager of the ATC Mr. Fred Vohsdahl is explaining the latest Qualitex 800 control system © 2018 TexData International



Mrs. Croenenbroek, Mr. Heinrichs and Mr. Vohsdahl © 2018 TexData International

COMPOSITES EUROPE 2018

FOCUS ON PROCESS TECHNOLOGIES

© 2018 COMPOSITES EUROPE

Composites

In the competition of lightweight construction and design materials, composites are among the winners – automotive engineering, aerospace, wind energy, boatbuilding and construction can no longer do without glass- and carbon-fibre reinforced plastics (GFRP & CFRP). Nevertheless, the greatest impetus right now is coming from the composites industry itself: technological advancements in the process chain. From 6 to 8 November, COMPOSITES EUROPE in Stuttgart will drive home that point.

Trade fair visitors will meet more than 350 exhibitors from 30 countries who in Stuttgart will present state-of-the-art technology and the potential of fibre-reinforced composites – in the exhibition area as well as in numerous event areas, lecture forums and themed tours.

With the new "Process live" format, coordinated processing and manufacturing processes will become the visible focus of this year's COMPOSITES EUROPE. Mechanical and plant engineering companies will get together in group exhibits to showcase their technologies in live interactions – thus enabling visitors to experience sub-processes presented in a larger context.

PARTNERSHIPS ACCELERATE GROWTH

Among others, the cutting specialists Gunnar (Switzerland), the composites automation experts Airborne (Netherlands) and the gripping systems providers Schmalz (Germany) will join forces to create a combined production cell in a process-safe depiction of the entire value chain from roller materials to the finished layer structure of a composite component. In this setup, interlocking hardware components are fully connected with each other via software. "Partnerships within the process chain are accelerating the growth of the composites industry; that's what we want to show with the new 'Process live' format", says Olaf Freier, event director of COMPOSITES EUROPE.

LIGHTWEIGHT TECHNOLOGIES FORUM

Besides the optimisation of the process chain, industry research today is heavily focused on the use of GFRP and CFRP in multi-material systems. The Lightweight Technologies Forum will once again demonstrate how composites play to their strengths alongside other materials in the material mix for hybrid structural components. A total of 16 exhibitors will present materials, tools and exhibits here – from fillers to bonding agents and presses for



© 2018 COMPOSITES EUROPE

laminating different materials to semi-finished hybrid products. In various presentations, experts will provide an overview of new products.

FROM DIGITALISATION TO RECYCLING: KNOW-HOW IN THE SUPPORTING PROGRAMME

Manufacturing technology, recycling, digitalisation and thermoplastics will be central themes in the programme of the COMPOSITES Forum.

The exhibitors at the "Bio-Based Composites Pavilion", which will again be set up in cooperation with the nova-Institute, will reflect the development of the market for green composites. The focus will





be on application options of wood-polymer composites (WPC), natural fibre composites (NFC), bio-based thermoplastics and thermosets for composites, and bio-based plastics.

KICK-OFF EVENT: 4TH INTERNATIO-NAL COMPOSITES CONGRESS (ICC)

The International Composites Congress (ICC) will once again kick off COMPO-SITES EUROPE. Starting the day before the trade fair (5 and 6 November), international experts at the event with the headline topic "Composites – On the Path to Becoming a Key Industry?" will discuss applications, materials, process technologies and market prospects.

INDUSTRY 4.0 & DIGITIZATION

#Software #Control SETEX AND HALO ANNOUNCE STRATEGIC ALLIANCE

SETEX Schermuly textile computer from Germany, a market leader in designing, manufacturing and implementing automation solutions for the textile dyeing and finishing market, and the company Halo, ERP-provider and specialist for customized solutions from fibre to product, announce to have entered into a strategical partnership. The strategic alliance allows to put into practice a comprehensive solution for processing and finishing of textiles via integration of Inteos and OrgaTEX components. Vertical manufacturers with knitting or weaving departments, will be pleased of the benefits of the range of Inteos modules, deeply integrated into the OrgaTEX platform and working out of the box.

"The combination of Halo's longstanding experience as provider of customized MES- and ERP-solutions and SETEX's position as a market leader for textile automation solutions, ensures a maximum in competence for fully integrated textile manufacturing solutions. As a result, Industry 4.0 will become a reality at your company", states Marcus Ott of Halo.

#Software #Knitting

MONARCH AND BMSVISION WILL BRING INDUSTRY 4.0 TO THE KNITTING INDUSTRY

Monarch, a supplier of high-end circular knitting machines and Belgium based BMSvision have entered into a cooperation agreement for the development, marketing, installation and service of a state-of-the-art Manufacturing Execution System (MES) for the circular knitting industry. The system, which is based on the proven BMSvision KnitMaster architecture, is marketed as MMS – Monarch Monitoring System.

Using the LAN interface board of the Monarch machine, all production data is automatically collected and sent to the MMS server for real-time analysis and reporting. An additional interface has been developed with the LGL feeders on the machine providing real-time information of yarn tension and yarn consumption in the MMS monitoring application. Older machines or machines from any other brand are connected by means of one of BMSvision touch screen based data collection terminals.

#Sewing

SEWBOT® BRING MAUFACTURING OF T-SHIRTS BACK TO THE US

Softwear Automation CEO Palaniswamy Rajan explained in a FOX News interview how SEWBOT®S with AI will enable local supply chain manufacturing in the US and Europe to better serve consumers. To the question how hart it will be to bring the value chain for textiles, for particular for apparel back to the US he answered that in the past it was not feasible because of competition in the labour costs. Now sewing automation changed the situation. His current focus is on T-Shirts. 3.5 billion T-Shirts are bought in the US a year and 98% are imported, although the USA is the third largest cotton producer in the world. He said a local supply chain serves the consumer better and there are a lot of economic reasons doing that. In the next 5 to 7 years they want to bring manufacturing of billions of T-Shirts back to the USA, he concluded.



SEWBOT machine © 2018 Softwear Automation

#Event

INDUSTRIE 4.0 MET IOT

International experts discussed the opportunities and challenges of digitisation in manufacturing on September 10th, 2018 in Chicago, USA.

The event "Solutions Theater – Industrie 4.0 Meets the Industrial Internet of Things" was presented by Hannover Messe USA, together with its partners Plattform Industrie 4.0, Manufacturing USA, Manufacturing Leadership Council, Industrial Internet Consortium and National Electrical Manufacturers Association.

#Event

WORKSHOP INDUSTRY 4.0

The Institut für Textiltechnik (ITA) of RWTH Aachen University, AGIT Aachener Gesellschaft für Innovation und Technologietransfer mbH and the Embassy of the Republic of Korea (Bonn) are organizing a praxis-oriented workshop on Industry 4.0 on October 16-17, 2018 at DCC in Aachen as a warm-up for the conference of the alumni network Germany Korea (ADe-Ko) (October 17-19, 2018).

www.ita.rwth-aachen.de/events

SUSTAINABILITY

#Event

TEXTILE EXCHANGE SUSTAINABILITY CONFERENCE PARTNERS WITH THE 5TH BLUESIGN® CONFERENCE

Sustainable textile and apparel production will take center stage in October in Milan as two leading organizations – bluesign technologies and Textile Exchange – collaborate and descend on the legendary fashion capital to hold back-toback conferences over the course of five days. Industry leaders, including some of the world's most recognized brands and retailers, will convene to discuss the most important sustainability challenges facing the sector.

The 5th bluesign® conference will take place October 18 and 19 at the Cavallerize, part of Milan's recently renovated Museo Nazionale della Scienza e della Tecnologia. This year's conference theme is "TraceAbility. NetworkAbility. TransformAbility: Stitching the blue way together." Immediately after, from October 22 to 24, Textile Exchange will hold its annual Textile Sustainability Conference at the Milano Congressi (MiCo). Its theme is "United by Action: Accelerating Sustainability in Textiles and Fashion."

"We are pleased to cooperate with Textile Exchange and connect professionals



TE Conference 2016 in Hamburg © 2018 TexData

around the world to drive the sustainability transformation in the industry," said Jill Dumain, CEO at bluesign technologies. "Textile Exchange recognizes the importance of collaboration in order to accelerate sustainability in fashion, and this year's Textile Exchange conference is noteworthy for highlighting collaborative initiatives transforming our industry in more sustainable ways," said LaRhea Pepper, Managing Director of Textile Exchange.

textileexchange.org www.bluesign.com

#Yarn #Polyester #Dyeing

HUNTSMAN TEXTILE EFFECTS REDE-FINES DYEING OF POLYESTER INCLU-DING MICROFIBER AND BLENDS

The demand for polyester and man-made fibers is booming as sports and athleisure apparel markets expand rapidly around the world. At the same time, big-name brands that set trends in the sector continue to increase focus on sustainability and performance. As such, this is putting pressure on mills since the current industry standard involves chemically active diffusion accelerants that contain unwanted chemicals and require additional leveling agents and anti-foaming products that may be hazardous to people and the environment.

Developed by Huntsman Textile Effects specifically to meet these challenges, UNIVADINE® E3-3D diffusion accelerant is low-odor, free of benzyl benzoate and other hazardous substances. Part of Huntsman's range of innovative dyEvolution[™] dyeing auxiliaries, it uses Huntsman's Active Diffusion Technology to enable highspeed dyeing with best-in-class leveling, retarding and migration properties. www.huntsman.com

#RESEARCH

STUDY "TEXTILE & SUSTAINABILITY" PROVIDES SITUATION AND TREND ANALYSIS

A new study "Textile & Sustainability" by 'Bayern Innovativ' provides an orienting framework for companies in the textile chain and users of textile materials on the topic of ecological sustainability. In addition, it provides a comprehensive overview of the current situation in the textile and clothing industry and shows technological approaches and potential. The study was prepared by Bayern Innovativ in cooperation with the Association of the Bavarian Textile and Clothing Industry e. V. and Swiss Textiles, the Swiss Textile Federation. Funding came from the Bavarian Ministry of Economic Affairs, Energy and Technology.

The study shows that environmental sustainability will become very important over the next five to ten years, especially in the outdoor and sports sectors. For technical textiles, the focus is on achieving standards and functions defined by clients.

The results of the study are based on 30 detailed interviews with experts from leading companies and institutes from Bavaria, Germany and Switzerland as well as a written survey in which over 150 experts from the textile and clothing industry participated. The results are supplemented by information from a profound research in the trade and business press.

The study "Textile & Sustainability" (GERMAN LANGUAGE) can be ordered as a print product from Bayern Innovativ GmbH at a price of 380, - EUR plus VAT. www.bayern-innovativ.de/textilstudie2018

RECYCLING

#Research #Polyester

INDUSTRY RESEARCH GROUP "POLYMER RECYCLING" DEVELOPS CIRCULAR ECONOMY CONCEPTS

On 2nd of October 2018, twenty players from the textile industry attended the information event and kickoff meeting of the Industry Research Group "Polymer Recycling" at the Institut für Textiltechnik (ITA) of RWTH University in Aachen, Germany.

Within the framework of the Industry Research Group (IRG), a consortium consisting of companies along the textile value chain and the ITA is conducting application-oriented and industrially oriented basic research. In doing so, technological, economic and strategic solutions to relevant questions are developed systematically.

The target group of the IRG "Polymer Recycling" are companies that deal with the subject of recycling in the textile industry - from plant constructors to material, fibre and textile manufacturers to producers of end products and recyclers. The consortium's vision is that 100% of all textile waste can be recycled. In the short term, relevant material streams in the textile industry will be analyzed with regard to recycling and, based on this, a concept



Polymer recycling © 2018 ITA

for the detection and separation of different fibre materials will be developed. In the medium term, a plant technology will be developed that meets the industrial requirements for processing textile waste. In the long term, textile waste, also consisting of mixed fibres (e.g. cotton and polyester), is to be recycled and extruded into high-quality yarns by using chemical recycling.

CURRENT PARTNERS OF THE IRG "POLYMER RECYCLING" ARE:

- **Technip Zimmer** GmbH, Frankfurt, Germany
- Wellmann International Ltd, Mullagh, Republic of Ireland
- **Oerlikon Textile** GmbH & Co. KG, Remscheid, Germany
- Reliance Industries Ltd., Rasayani, India
- Decathlon, Lille, France.

The participation of further companies, which want to take on the goal of a "closed-loop" together with the consortium, is desired. Please contact Inga.Noll@ita.rwth-aachen.de.

#Machinery #Nonwovens

LAROCHE SHOWS LATEST RECYCLING SOLUTIONS AT ITMA ASIA

LAROCHE has been a major player in the textile waste recycling and airlaid nonwo-ven field and is now deeply involved in new technologies for turning post-consumer goods into valuable products.

Special lines now can open used clothing back into fibers whilst removing the metal and plastic contaminants. The fibers can then be airlaid and thermobonded into felts for the automotive, bedding and furniture industries. Old mattresses can be deconstructed and the foam can be shredded into chips, the textile portion can be opened back into fibers and both can be airlaid and thermobonded back into components for new mattresses. Solutions will be presented at ITMA Asia. I **www.laroche.fr**

Brands

IN 2024 ONLY RECYCLED POLYESTER IN ADIDAS SHOES AND CLOTHING

The sportswear giant Adidas has been trying to cut down on its use of new plastic over the last few years and started to produce performance shoes and soccer jerseys made from recycled ocean plastics and polyester in 2016. Now the German company is doubling down on its sustainability push, telling the Financial Times that it is phasing out the use of virgin polyester over the next six years. Instead, by 2024, Adidas will only use recycled polyester in its shoes and clothing.

#Event "CIRCULAR ECONOMY" AT DORNBIRN GFC

"Circular Economy" was one of the key topics of this year's 57th GFC in Dornbirn, Austria. The rapidly growing Canadian brand Lululemon Athletica, represented by Yogendra Dandapure, provided forward-looking trends and the technology approach for the industry. Edwin Keh, CEO of the international renowned Hong Kong Research Institute of Textiles and Apparel HKRITA, gave a lecture on "Circular Economy" and also participated at the subsequent panel discussion. HKRI-TA is a frequent medalist of the "Geneva International Annual Invention Awards". After the lecture block a panel discussion "Circular Economy - What an Opportunity!" took place, moderated by Reiner Hengstmann. Participants were Eberhard Brack/Märkische Faser, Peter Bartsch/Lenzing, Michael Chtepa/Seagual4U, Yogendra Dandapure/Lululemon, Edwin Keh/ HKRITA, Luis Marinheiro/ISWA (International Solid and Waste Association). They all demonstrated high commitment and approaches to the current topic, strongly promoted by the EU Commission.



RECYCLING

#Production #Retail <u>NEW FACILITIES FOR</u> TEXTILE BLEND RECYCLING

The H&M Foundation and The Hong Kong Research Institute of Textiles and Apparel (HKRITA) opened two first of its kind textile recycling facilities in Hong Kong. The award-winning hydrothermal recycling technology is for the first time put into practice at scale. The new pre-industrial size facility scaling this technol-ogy was opened at a ceremony joined by the Hon Mrs Carrie Lam Cheng Yuet-Ngor, The Chief Executive of the Hong Kong Special Administrative Region (HKSAR), and Mr Nicholas W Yang, Secre-tary for Innovation and Technology of the HKSAR. The purpose of the facility is to invite fashion brands and stakeholders worldwide to see, test and implement this technology within their own operations.

In addition, a miniaturized Garment-To-Garment Recycling System is opened for the public. These facilities are the results of an innovative partnership with HKRITA to accelerate research on textile recycling, to speed up the development of a closed loop for textiles, with the purpose to safeguard the planet and our living conditions.



H&M Showroom for garment recycling © 2018 H&M

In September 2017, only one year into the four-year long partnership between HKRITA and non-profit H&M Foundation, HKRITA presented a technological break-through with a hydrothermal method for recycling cotton and polyester blends into new fibres.

Blends are the most common, yet unrecy-clable, type of textile in the world. As a non-profit the H&M Foundation works to drive change for the global fashion indus-try, which is why HKRITA will license the results widely to make it available to all and enable a bigger impact.

"This is a significant step towards a new fashion industry that operates within the planetary boundaries. As we scale up and make this technology freely available to the industry, we will reduce the depend-ence on limited natural resources to dress a growing global population," says Erik Bang, Innovation Lead H&M Foundation.

#Blends #PROJECT STARLINGER PART OF TEX2MAT

Within the textile network PlasTexTron©, Starlinger recycling technology is searching for an ecologically and economically sound solution for the recycling of mixed textile waste of multi-material composition. Three universities and eight Austrian companies are involved in the COIN-project TEX2MAT, which is led by the Plastics Cluster of ecoplus, the business agency of Lower Austria, and funded by the Austrian Federal Ministry for Digital and Economic Affairs. The project TEX2MAT addresses the recycling of different kinds of old textiles that consist of a mixture of polyester and cotton.

The first step is the enzymatic separation of polyester and cotton in a procedure developed by the Viennese University of Natural Resources and Life Sciences; after appropriate reprocessing, the materials are reused in new products. The input material is supplied by the companies Herka Frottier, Salesianer Miettex and Huyck.Wangner Austria, which are all located in Lower Austria. Starlinger recycling technology – a business unit of Starlinger which manufactures recycling lines and has already developed solutions for closed loop production in the field of polyester textiles - provides recycling services and expertise for the project.

To achieve an optimal result, regular controls of the material properties are performed by the University of Leoben.

THE PROJECT PARTNERS ARE WORKING ON SPECIFIC CASE STUDIES:

- Mixtures of polyester and cotton from the production of towels as well as old textiles in the form of bed linens and working clothes are shredded by Starlinger recycling technology in Weissenbach and then undergo enzymatic treatment at the Technical University of Vienna. The goal is to develop a sample process for closed loop production.
- Technical nonwovens made of polyamides are shredded and turned into regranulate by Starlinger recycling technology; Thermoplastkreislauf GmbH then adds substances such as glass fibers, additives and/or colors as needed (a process commonly known as compounding). The companies Multiplast Kunststoffverarbeitung and Fildan use this customized material in the production of highly technical plastic parts such as components for fire extinguishers or bra fasteners.

The project TEX2MAT started in November 2017 and will be running over the course of two years. Initial results are expected to become available until K show 2019 in Düsseldorf.

BUSINESS

#Technical Textiles AUTONEUM OPENS TWO NEW PRODUCTION SITES IN CHINA



fltr: Hank Shi (General Manager Pinghu), Martin Hirzel (CEO), Andreas Kolf (Head Business Group Asia) and Julien Latil (Head Operations North&East China) © Autoneum

Autoneum continues its growth course in China by opening two new plants in addition to the eight existing ones. The ninth Autoneum production facility was officially opened in Pinghu (Zhejiang Province) yesterday in the presence of CEO Martin Hirzel. A further plant in the northeastern city of Shenyang Tiexi (Liaoning Province) is already in the ramp-up phase. The series production of lightweight multifunctional components for noise and heat protection will start at both plants in a few days' time.

Fiber #Yarn#Nylon 6,6

INVISTA TO ADD 40,000 TONS OF NY-LON 6,6 POLYMER CAPACITY BY 2020

INVISTA plans to add 40,000 tons of nylon 6,6 polymer capacity at its current 150,000-ton polymer plant at the Shanghai Chemical Industry Park (SCIP). Construction is targeted for mid-2019 and production would begin in 2020. "We are continuing to make strategic investments to best meet our customers' needs," said Pete Brown, INVISTA vice president of nylon polymer. "In looking at our forecast for the future growth of the nylon 6,6 polymer market, we see increased demand in Asia and are expanding our capacity to meet that demand."



New plant at SCIP © 2018 INVISTA

Fiber #Yarn #Nylon 6,6 'ASCEND PERFORMANCE MATERI-ALS' ACQUIRES 'BRITANNIA TECHNO POLYMER'

In August Ascend Performance Materials, the largest global fully integrated producer of nylon 6,6 resin, announced today the purchase of Britannia Techno Polymer (BTP), an engineering plastics compounder based in the Netherlands.



Phil McDivitt, CEO (left) and Andrew Leigh director of compounding technology at Ascend Performance Materials © 2018 Ascend Performance Materials

The acquisition provides Ascend with a leading engineering plastics manufacturing base in Europe and an expansion to its growing portfolio of proprietary compounds.

#Software #CAD #PLM #Cutter GERBER ACQUIRES TWO COMPANIES WITHIN THREE DAYS

In October Gerber Technology announced that it has acquired MCT Digital, adding modular laser cutting technology to their existing industrial strength finishing solution hardware and software portfolio. The addition of MCT's high-end large format cutting builds on Gerber's heritage in the sign & graphics and packaging industries, as well as giving Gerber a key technology platform to serve its industrial markets. Three days later Gerber Technology announced that it has acquired San Francisco based Avametric. Avametric develops the world's leading cloth simulation technology and enables fashion brands to deliver highly accurate 3D renderings of their products on customizable avatars for e-commerce and augmented reality (AR) applications. Gerber says this move will position Gerber as the leader in 3D for the fashion and apparel industry.

The acquisition follows 12 months of collaboration between the companies after Gerber announced in November 2017 they would be integrating Avametric's fabric simulation engine into their Accu-Mark® 3D platform.

#Spinning #Textile Machinery STC SPINNZWIRN: A NEW COMPANY OF THE STARLINGER GROUP

Already in May 2018, the Austrian Starlinger Group announced the successful acquisition of the Chemnitz-based business unit Barmag Spinnzwirn from Oerlikon. With the closing effected on October 1, Oerlikon Barmag Spinnzwirn now turns into the independent company STC Spinnzwirn GmbH (Starlinger Textile machinery Chemnitz).



Steffen Husfeldt, designated Managing Director of STC Spinnzwirn © 2018 Starlinger

PEOPLE

#Digitization #Knitting

MAXIMILIAN KÜRIG NEW MANAGING DIRECTOR OF KARL MAYER DIGITAL FACTORY

In July 2018 the KARL MAYER Digital Factory received an additional Managing Director. In the future, Antonia Gottschalk, Head of Digitalisation at KARL MAYER, will be supported at top executive level by Maximilian Kürig. The graduate mechanical engineer is committed to KARL MAYER's pioneering spirit. "I would like to establish a profitable subsidiary that sets the pace of innovations for software and digital solutions in machine and plant engineering."



Maximilian Kürig, Managing Director KARL MAYER Digital Factory, © 2018 KARL MAYER

textile.4U

#Exhibition #Textile Care

KERSTIN HORACZEK APPOINTED GROUP SHOW DIRECTOR OF MESSE FRANKFURT

Kerstin Horaczek (37) has been appointed Group Show Director of Messe Frankfurt effective 1 September 2018.



Kerstin Horaczek, Group Show Director Messe Frankfurt © Messe Frankfurt

In this position, she will be responsible for events worldwide in the Safety, Security & Fire, Food Technologies, Textile Care, Cleaning & Cleanroom Technologies and Environmental Technologies industry sectors. Kerstin Horaczek is to take over from Ruth Lorenz, who will be retiring in September after 27 years at Messe Frankfurt, 21 of which in managerial positions.

#Digital Printing

EFI APPOINTS BILL MUIR AS NEW CEO

Electronics For Imaging, Inc., a world leader in customer-focused digital printing innovation, today announced that its Board of Directors has named William (Bill) D. Muir as its new Chief Executive Officer. Muir was most recently the COO of Jabil, a product solutions company. His appointment is effective October 15, 2018, when he will also join the Board of Directors. Muir succeeds Guy Gecht, who informed the Board he intended to step down as CEO upon the appointment of his successor. Gecht will remain a member of the Board of Directors.

#Exhibition #Composites ERIC PIERREJEAN NEW CEO JEC GROUP

Mr. Eric PIERREJEAN, who joined the company in January, has been appointed Chief Executive Officer, succeeding to Mrs. Frédérique MUTEL.

ADELINE LARROQUE NEW JEC EVENTS DIRECTOR FOR EMEA

Mrs. Adeline LARROQUE joins JEC Group as Show Director JEC World and ,EMEA Events' with more than 15 years of Global work experience as she has worked in several countries such as USA, UK, China, India, Qatar and UAE where she has developed a strong skill set in exhibitions and events management.



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THE TEXDATA MAGAZINE

RESEARCH & DEVELOPMENT

#Event

AACHEN – DRESDEN – DENKENDORF ITC 2018

The next ADD International Textile Conference will take place in November 29th – 30th, 2018, at Eurogress Aachen. This year's motto is 'Turning fibers into value': Which new functions do textiles provide and which new fields of application are emerging? How can new technologies add value to textile products and which opportunities are opening up via the progress of the digital era? At the conference, experts from the fields of Textile Chemistry, Finishing and Functionalization, Textile Machinery as well as Manufacturing and Composites meet in order to discuss the latest developments.

Session topics are for example 'Functionalization & New Materials', 'Textile Machinery & New Technologies' and 'R&D projects in small and medium-sized enterprises'. Partner country is Italy. Representatives from the Italian textile industry as well as from Italian research institutions and associations will provide a comprehensive insight into the textile landscape of this year's partner country. Early-Bird-Discount and register until October 31st, 2018: www.aachen-dresden-denkendorf.de/ en/itc/program/registration/ For the first time there will be a Business-to-Business-Session to meet potential cooperation partners offered by ADD-ITC partner NRW.International. Register free of charge: https://additc2018.b2match.io/home

#Composites

IRG COSIMO FACILITIES UNVEILED

IRG CosiMo new facilities and first piece of equipment were unveiled by State Minister Franz Josef Pschierer from the Bavarian ministry of economics, energy and technology during an Opening Ceremony in September. These new infrastructures were set up less than two months after IRG CosiMo (Industry Research Group: Composites for Sustainable Mobility) started, the industry's first private consortium focusing on the development of thermoplastic materials and process technologies in aerospace and automotive.



f.l.t.r.: Helge von Selasinky (ITA), Dr. Norbert Müller (EN-GEL), Dr. Thomas Ehm (Premium AEROTEC), Franz Josef Pschierer (Bavarian ministry of economics, energy and technology), Prof. Dr.-Ing. Stefan Schlichter (ITA), Fabrizio Ponte (Solvay), Hassine Sioud (Faurecia), Wolfgang Hehl (TZA) IRG CosiMo is unique as it combines companies along the whole thermoplastic composites process chain, from the materials and semi-finished products (Solvay) followed by specially adapted processing machinery (ENGEL) to applications in automotive (Faurecia) and aerospace (Premium Aerotec). Agile project organization realized by ITA Augsburg will enable a compact project structure leading to timely realization. "We are proud to have helped to organize the project and expect major effects of synergies between automotive and aerospace for new products like drones or air taxis in high volume applications" said Prof. Dr. Stefan Schlichter, Managing Director of ITA Augsburg. IRG CosiMo is open to integrating new partner companies. www.ita-augsburg.de

#Technical textiles #Aerospace <u>CONNECTING THE WORLD –</u> <u>ONE COMMUNICATION SATELLITE</u> AT A TIME!

ITA successfully launched its Aerospace engineering and Manufacturing program focussed on developing low cost, high quality solutions for aircraft engine components, aircraft parts manufacturing and metal matrix composites for aerospace applications. These have been undertaken through 6 EU, international and public funded projects. ITA's latest Space Systems development initiative has now been launched with the new Space-R-eflector project.

As a part of this initiative, ITA and its partner Large Space Structures GmbH (LSS) based out of Munich will develop advanced communication satellite systems. ITA's role will primarily be focussed on the development of the reflector surface mesh structure.



Microscopic image of a reflector warp knit fabricated at the ITA, @ 2018 ITA

#Awards

PAUL SCHLACK/WILHELM ALBRECHT AWARDING 2018

The Paul Schlack / Wilhelm Albrecht Prize 2018 was awarded to following innovative projects: Dr. Alexander Weise, RWTH Aachen, ITA convinced the jury with his project "development of graphene modified multifilaments for the construction of textile electrical storage" and Dr. Christoph Rieger, DITF/ITV Denkendorf convinced with his project, "development of a manufacturing system for high temperature stable meltblown nonwovens and their characteristics".

RESEARCH & DEVELOPMENT

#IT #RFID (STFI) SHOWS POTENTIAL OF WIRELESS COMMUNICATION IN TEXTILE PRODUCTION

The STFI shows the use of wireless communication solutions in textile production, especially in the identification and localization of objects as well as for communication. So-called RFID systems, which are based on the transmitter-receiver principle by means of radio waves, are used, for example, in transport systems and weaving machines. NFC tags, which are used to wirelessly transfer data between two closely spaced objects (near field communication), are in turn attached to selected machines for operator identification, while data can be transferred using Bluetooth interfaces at relevant points and transport aids. Product and quality data, the production history and control information (such as machine limits and usage instructions) can be exchanged quickly and easily.

The use of these versatile wireless technologies enables, among other things, batch tracking along the entire process. They create a transparency in the flow of information, which is the basic requirement for optimization and troubleshooting. Likewise, the novel technologies are a prerequisite for context- and role-specific assistance systems and self-control of production or logistics. The STFI Labtour on the topic of wireless communication on September 27, 2018 is aimed at entrepreneurs, executives and experts from production, IT and project management and serves as an introduction to the topic. The STFI team will present the different types and applications of identification systems in everyday life and in industrial practice. The participants also have the opportunity to test the various technologies and experience them in action.

Sign up until September 25, 2017 at frizzi. seltmann@stfi.de.

DITF INTRODUCES HEAT BALANCE MEASURING TOOL

At DITF, a Heat Balance Measuring Tool (HBMT) was developed that imitates heat and humidity transfer via the human skin; this allows heat and humidity exchange to be determined experimentally. When clothing is undergoing tested in the laboratory, it makes sense to specify the temperature of the measuring surface. When developing innovative and personalized apparel, however, defining the heat output of the measuring surface is of more significant interest. Here, the heat balance between heat generation and emission via the skin is the focus. The measuring device's conception is based on international norms. It consists of a measuring surface with integrated control for temperature and water supply surrounded by a base plate and frame; this prevents heat from being lost downwards and to the sides. In between are the heating elements that distribute the specified temperature evenly across the measuring surface.

#Award #VDMA

WALTER REINERS FOUNDATION AWARDS FIVE YOUNG ENGINEERS

Peter D. Dornier, member of the Executive Board of the VDMA Textile Machinery Federation and Chairman of the Walter Reiners Foundation for the Promotion of Young Engineers, honours five young talents. Numerous entrepreneurs and managers from the German textile machinery industry took part in the award ceremony at the Digital Capability Center (DCC) in Aachen, Germany.

The prizewinner in the dissertation category, Dr.- Ing. Benjamin Weise, comes from ITA (RWTH Aachen University). He has dealt with a complex production process for the manufacture of modified multifilament yarns, which offers new perspectives for the development and manufacture of textile charge carriers. M.Sc. Susanne Fischer, winner of the Master's thesis category, has systematically and comprehensively solved the challenging task of integrating motion sensors into a finger glove at Reutlingen University.

The 2018 creativity award winners are team Mr. Jan Merlin Abram and Mr. Alon Tal from ITA Aachen as well as Mr. Eric Otto from the ITM in Dresden. The students Abram and Tal have developed a guideline for the design of hybrid morphing textiles. In addition to the classic functions in conventional and, in particular, composite applications, locally defined, functionally effective joint, torsion, expansion and compression mechanisms can be integrated into the textile.

The prizewinner Otto is awarded for a concept study for the development of a circular knitting machine with a variable diameter needle cylinder, which can lead to further flexibility in the circular knitting process.



f.l.t.r.: Eric Otto, Prof. Thomas Gries, M.Sc. Susanne Fischer, Prof. Klaus Meier, Dr. Benjamin Weise, Prof. Gunnar Seide, Alon Tal, Jan Merlin Abram, Peter D. Dornier © VDMA

PREVIEW



NEXT ISSUE:

#Industry 4.0 Blockchain will change a lot!

#Sustainability New fibers for nonwovens

TECHTEXTIL 2019

The best innovations in technical textiles and nonwovens.

TEXPROCESS 2019

Digitization and automation are game changers.

New Concept!

Interviews with leaders from textile and machinery industry!

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